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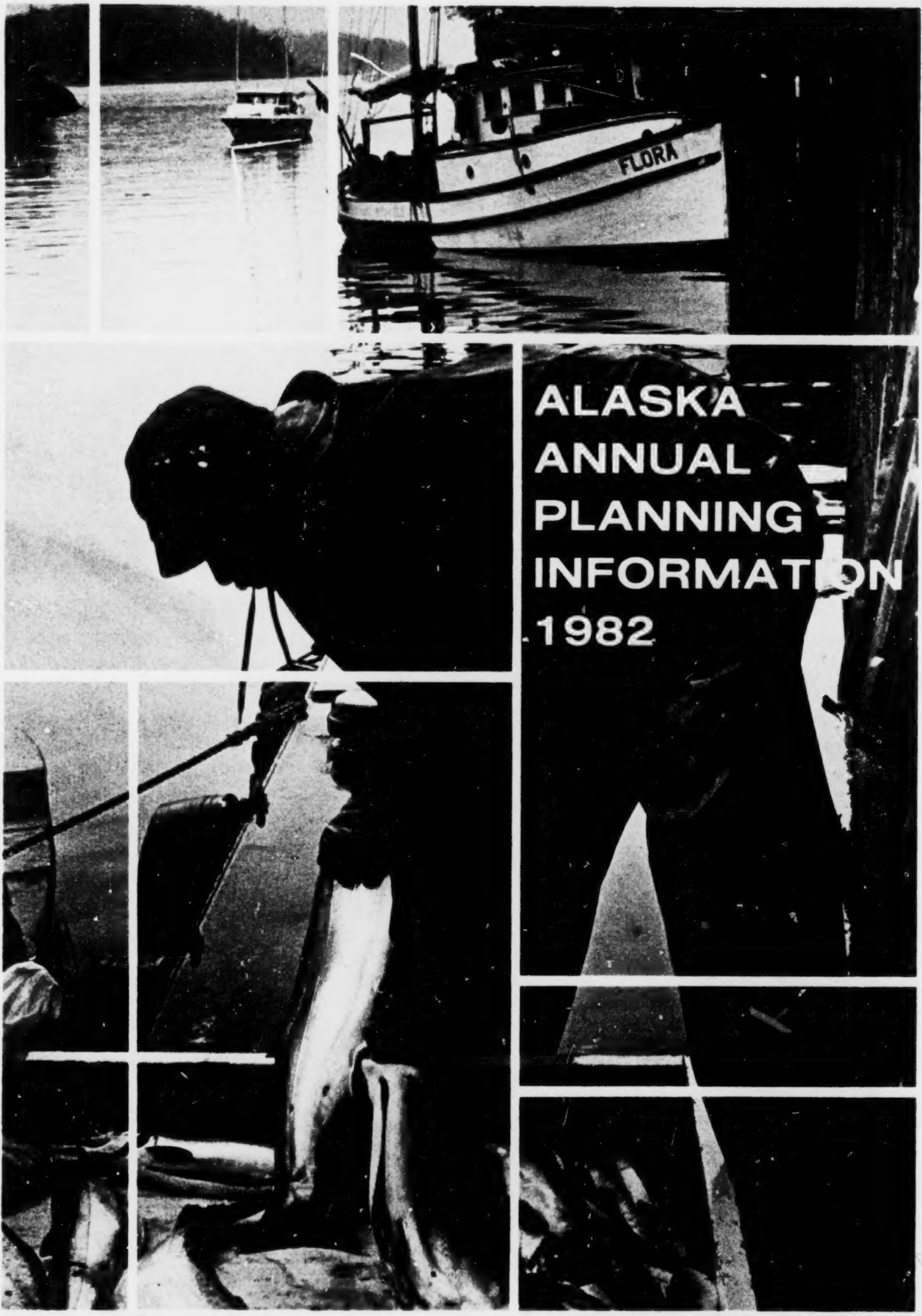

ALASKA ANNUAL PLANNING INFORMATION 1982

ALASKA DEPARTMENT OF LABOR, JAY S. HAMMOND, GOVERNOR

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ANNUAL ALASKA PLANNING INFORMATION
JANUARY 1982

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Alaska Annual Planning Information provides a condensed volume of labor market information for Alaska residents, businesses and government agencies. Publication of this issue is the result of full cooperation of all Research and Analysis staff. Please address inquiries to:

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CHAPTER I AREA DESCRIPTION

INTRODUCTION

Alaska is the "Great Land," a land of contrasts and extremes. "Bigness" may have been coined in Texas, but two of Texas could be comfortably confined within the boundaries of Alaska. The state of Alaska, with 580,000 square miles, is equal in area to approximately one-fifth of the continental states. Population, on the other hand, is the lowest among the 50 states. All Alaskans could reside in the city of Seattle with room to grow. Other geographic extremes exist in the state. "Alaska has the highest point Mt. McKinley-20,320 ft.); the northernmost point (Pt. Barrow-71°23'N); and relative to the Greenwich meridian, the westernmost point (Amatignak Island-179°10'W), and the easternmost point (Pochnoi Point-179°46'E) in the United States."*

Extremes in weather also exist in Alaska; from the mild (and frequently damp) southeast to the dry interior where temperatures can plunge from summertime highs of +100°F to -60°F in the depths of winter.

Many other contrasts prevail in Alaska. For instance, the state has the highest average weekly wage in the nation but also experiences some of the highest levels of unemployment. The activity and wealth of the state's business center, the city of Anchorage, shadows the economic poverty of many rural Alaskan villages.

The economy of Alaska for many years has been based on its abundance of natural resources - furs, gold, fish, timber and in recent years, oil. The only other major source of economic activity (and the most dominant) has been government. Compared to other states, relatively little manufacturing exists in Alaska. However, what does exist is very important, especially in southern and rural Alaska. Manufacturing is confined mainly to food processing (fish) and lumber and wood processing and occurs mostly during the summer months.

The Alaska economy is very seasonal and highly cyclical in nature. Harsh climatic conditions affect construction, timber harvesting, transportation, mining, and many other industries. The size of the fish harvest waxes and wanes over the seasons and years. Nonrenewable resources in the past have been discovered and exploited, creating "boom times," and then have depleted, resulting in "busts." Thousands of workers have migrated in and out of Alaska attracted by these resource generated booms.

* Foreward, Dictionary of Alaska Place Names U.S. Department of the Interior, Geological Survey. (Revised 1971).

Geographic and economic extremes present formidable challenges for the people of Alaska. But these challenges are being met and overcome. For example, due to the vastness of the state and small population, few highways or railroads have been built. Alaskans, however, have embraced the air age and more airplane pilots per capita reside in Alaska than any other state. Communications problems have also been overcome by the construction of one of the most advanced satellite systems that connects even the remotest parts of Alaska with the rest of the state.

The people of Alaska are the greatest resource. For Alaskans to benefit from natural resource and economic development, we must work toward meeting remaining challenges. Improved technical skills of the labor force should reduce the reliance on out-of-state workers. Alaska's natural resources should be managed and developed to provide equal opportunity and benefits to all Alaskans. The economic base needs to be broadened beyond volatile seasonal activities to provide stable year-round employment. Alaskans working together can accomplish these goals.

REGIONS

Six regional areas were established in Alaska to aggregate and report employment data at a sub-state level. The vast area of the state plus low population densities sometimes preclude the practicality of reporting data for small geographic areas. Problems can occur in providing employment and wage figures for sparsely populated rural areas due to confidentiality restrictions and limited data sources.

Regional areas are formed from combinations of census areas and subareas (see section on Census Areas). Each of the regions (Southeast, Gulf Coast, Anchorage-MatSu, Southwest, Interior, and Northern) is described below. Alaska's regions are not true labor market areas because the regions are not economically integrated geographic units in which workers can readily change jobs without changing place of residence.

SOUTHEAST

The Southeast region encompasses the Haines, Juneau, Ketchikan, Sitka, Wrangell-Petersburg, Outer Ketchikan-Prince of Wales, and Skagway-Yakutat-Angoon census areas (1980 version). The Southeast is bound on the east and south by the Canadian province of British Columbia, with the Pacific Ocean to the west. The St. Elias mountain range in the northwest separates Southeast from the rest of Alaska. The 1980 census showed 53,794 persons reside in Southeast with the three census areas of Juneau, Ketchikan, and Sitka accounting for about 72 percent of the total. The City and Borough of Juneau is the largest Southeast city and the capital of Alaska.

GULF COAST

Extending in a northwesterly direction from the Southeast region lies the Gulf Coast region. The Gulf Coast region lies along the rim of the Gulf of Alaska and includes the Kenai Peninsula and Kodiak Island to the west. Portions of the Gulf Coast area extend northward between the Matanuska-Susitna Borough and the Canadian border (Yukon Territories) as far as the city of Paxson. The Gulf Coast region is comprised of the Kenai Peninsula Borough, Kodiak Island Borough, and Valdez-Cordova census areas. Total population of the Gulf Coast in 1980 was 43,569. The cities of Kenai and Kodiak are the largest with 4,324 and 4,736 residents, respectively. Kodiak Island is the base for an extensive crab and shrimp fishery.

ANCHORAGE-MATSU

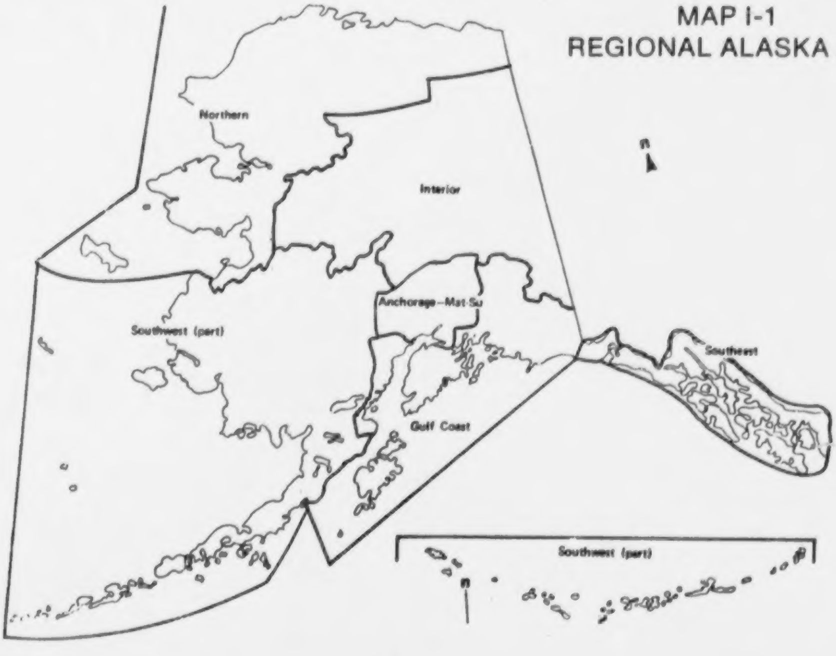
North of the Gulf Coast, and consisting of the Municipality of Anchorage and Matanuska-Susitna (MatSu) Borough census areas, is the Anchorage-MatSu region. The Municipality of Anchorage is the largest city and business center of Alaska. The MatSu Borough is the principle site of agricultural activity in the state. Combined population of Anchorage-MatSu is 192,247 or about 48 percent of the state total. This region is bound on the east by the Chugach Mountains, to the south by Cook Inlet and Kenai Peninsula, and in the north and west by the Alaska Range.

SOUTHWEST

West of Anchorage-MatSu and continuing on to the Bristol and Kuskokwim Bays is the Southwest region. The Southwest region also encompasses the Alaska Peninsula and the entire Aleutian Island chain. This region contains the Aleutian, Bethel, Bristol Bay Borough, Dillingham and Wade Hampton census areas and the McGrath-Holy Cross census subarea (Yukon-Koyukuk census area). The Southwest region is the site of the famous Bristol Bay salmon fishery. Population of the Southwest region is 30,485. Bethel is the largest city in the Southwest, with 3,576 residents.

INTERIOR

The Interior region lies to the north of Anchorage-MatSu. It is comprised of the Fairbanks North Star Borough and Southeast Fairbanks census areas and the Yukon Flats and Koyukuk-Middle Yukon subareas (Yukon-Koyukuk census area). The Interior region is bound by the Brooks Range to the north, the Canadian border on the east, the Alaska Range in the south, and on the west by the Koyukuk River drainage. Fairbanks is the largest city and commercial center of the Interior and also the home of the University of Alaska. Some 66,189 persons reside in the Interior in 1980 with approximately 82 percent located in the Fairbanks North Star Borough.



MAP I-1
REGIONAL ALASKA AREAS

NORTHERN

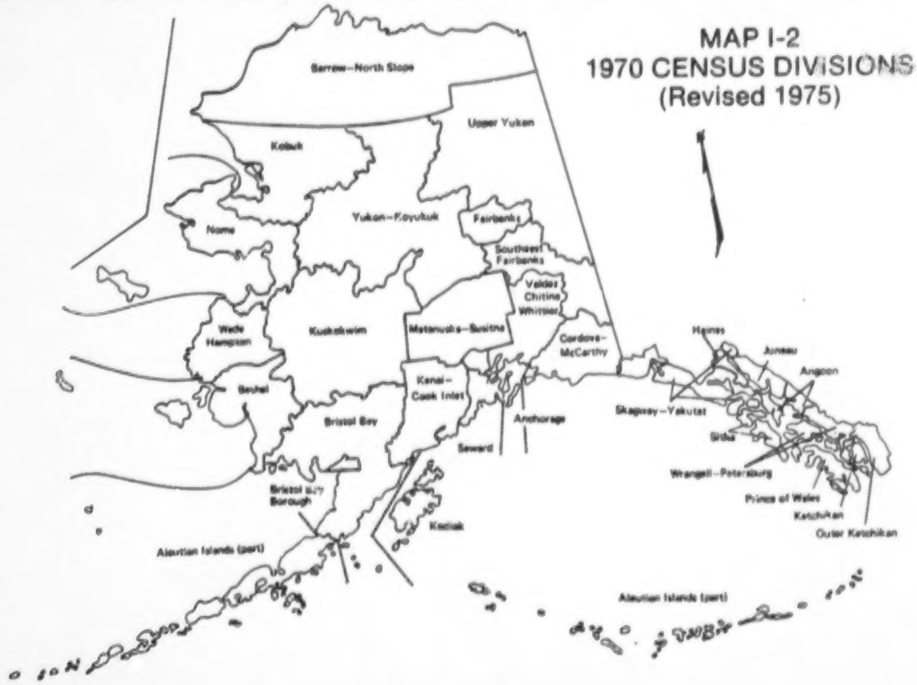
This area is the northernmost region of Alaska (and the U.S.) and is bound on the north and northwest by the Arctic Ocean, the Canadian border on the east, the Interior region in the south, and Norton Sound to the southwest. Alaska's major oil reserves are found in the Northern region where the Trans Alaska oil pipeline starts (Prudhoe Bay). The North Slope Borough (the farthest north and largest borough areawise in Alaska) and the Kobuk and Nome census areas comprise the Northern region. Some 15,567 persons live in the Northern region. Barrow (2,207) and Nome (2,301) are the two largest cities.

CENSUS AREAS

Alaska is divided into 23 geographic areas for the purposes of collecting and disseminating census information. These areas also provide the geographic base for the gathering and reporting of most labor market information.

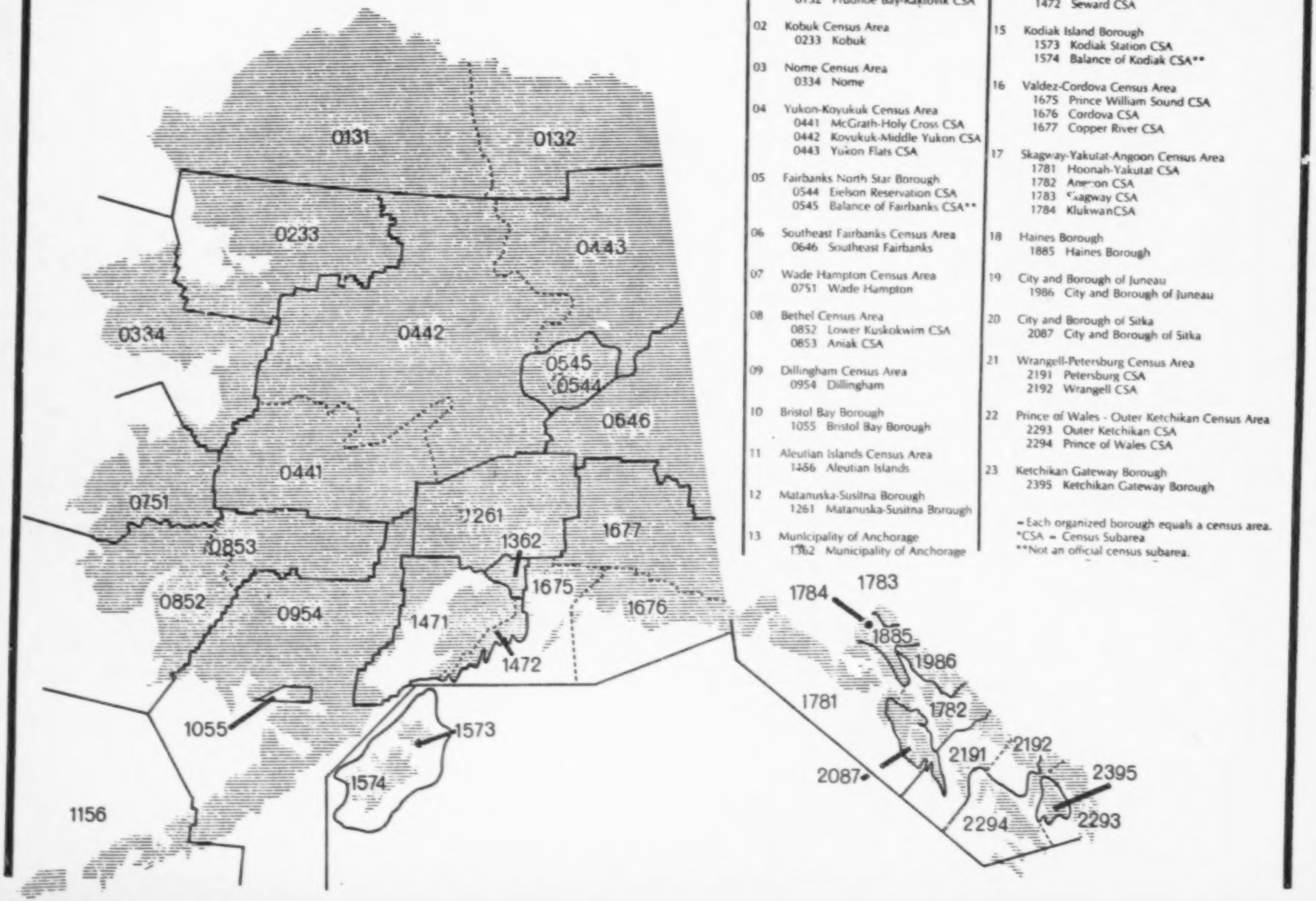
Boundaries for census areas have been modified or altered several times in the last three decades. Internal boundaries of Alaska have not been permanently set since the state is relatively new and formation of sub-state geo-political boundaries is an ongoing process. Unlike all other states, Alaska has not been completely subdivided into counties with permanent boundaries. Sub-state Alaskan governmental units known as organized boroughs are the closest equivalent to counties in other states. Organized boroughs, however, do not cover the majority of the land area of the state. A vast region of the state encompassing most of the interior extending to and including Western Alaska plus other parts of the state are collectively known as the "unorganized borough." No governmental bodies exist in this area outside of local cities and rural school districts. Regional affairs are under guidance of the state legislature.

MAP I-2
1970 CENSUS DIVISIONS
(Revised 1975)


Barrow—North Slope
Upper Yukon
Kobuk
Nome
Yukon—Koyukuk
Fairbanks
Southeast Fairbanks
Valdez Chitina Whittier
Wade Hampton
Kuskokwim
Matanuska—Susitna
Cordova—McCarthy
Haines
Juneau
Angoon
Bethel
Kenai—Cook Inlet
Anchorage
Skagway—Yakutat
Bristol Bay
Seward
Sitka
Wrangell—Petersburg
Bristol Bay Borough
Prince of Wales
Ketchikan
Kodiak
Outer Ketchikan
Aleutian Islands (part)
Aleutian Islands (part)

MAP I-3

1980 CENSUS AREAS & SUBAREAS



01 North Slope Borough
  0131 Barrow-Point Hope CSA*
  0132 Prudhoe Bay-Kaktovik CSA

02 Kobuk Census Area
  0233 Kobuk

03 Nome Census Area
  0334 Nome

04 Yukon-Koyukuk Census Area
  0441 McGrath-Holy Cross CSA
  0442 Koyukuk-Middle Yukon CSA
  0443 Yukon Flats CSA

05 Fairbanks North Star Borough
  0544 Eielson Reservation CSA
  0545 Balance of Fairbanks CSA**

06 Southeast Fairbanks Census Area
  0646 Southeast Fairbanks

07 Wade Hampton Census Area
  0751 Wade Hampton

08 Bethel Census Area
  0852 Lower Kuskokwim CSA
  0853 Aniak CSA

09 Dillingham Census Area
  0954 Dillingham

10 Bristol Bay Borough
  1055 Bristol Bay Borough

11 Aleutian Islands Census Area
  1156 Aleutian Islands

12 Matanuska-Susitna Borough
  1261 Matanuska-Susitna Borough

13 Municipality of Anchorage
  1362 Municipality of Anchorage

14 Kenai Peninsula Borough
  1471 Kenai-Cook Inlet CSA
  1472 Seward CSA

15 Kodiak Island Borough
  1573 Kodiak Station CSA
  1574 Balance of Kodiak CSA**

16 Valdez-Cordova Census Area
  1675 Prince William Sound CSA
  1676 Cordova CSA
  1677 Copper River CSA

17 Skagway-Yakutat-Angoon Census Area
  1781 Hoonah-Yakutat CSA
  1782 Angoon CSA
  1783 Skagway CSA
  1784 KlukwanCSA

18 Haines Borough
  1885 Haines Borough

19 City and Borough of Juneau
  1986 City and Borough of Juneau

20 City and Borough of Sitka
  2087 City and Borough of Sitka

21 Wrangell-Petersburg Census Area
  2191 Petersburg CSA
  2192 Wrangell CSA

22 Prince of Wales - Outer Ketchikan Census Area
  2293 Outer Ketchikan CSA
  2294 Prince of Wales CSA

23 Ketchikan Gateway Borough
  2395 Ketchikan Gateway Borough

-Each organized borough equals a census area.
*CSA - Census Subarea
**Not an official census subarea.

The U.S. Census Bureau, in consultation with the state of Alaska, has established census divisions or areas for its decennial censuses. The Census Bureau is mainly interested in uniform data collection and a nationwide reporting system with a standardized geographic coding scheme. Needs of the Census Bureau have not always been compatible with the state's needs. Consequently, Alaska has modified the system for its own purposes. Boundaries are the same but coding is altered.

The geographic area classification system developed for 1980 evolved over the last 20 years from a scheme based on election districts as first published in 1959. Geographic areas of 1959 were the 24 election districts established by the Alaska State Constitution in 1956. Election districts were replaced in 1970 by 29 census divisions and classified according to FIPS (Federal Information Processing Standards) census codes. These codes were modified in 1975. Advent of the 1980 census brought about a further restructuring of the census divisions. A census committee was appointed by Governor Hammond in 1977 to cooperate with the U.S. Census Bureau in formulating geographic areas for Alaska compatible with the state's needs as well as those of the federal government. The final geographic areas, as established, emerged from the work of this committee in conjunction with the Census Bureau.

The 29 census divisions were re-established as 23 census areas with the addition of 24 census subareas.

TABLE I-1

CONVERSION OF 1980 CENSUS AREAS TO CORRESPONDING 1970 CENSUS DIVISIONS

1980 2-Digit Code	1980 Census Areas	Corresponding 1970 Census Divisions
01	North Slope Borough	Barrow-North Slope
02	Kobuk	Kobuk
03	Nome	Nome
04	Yukon-Koyukuk	Yukon-Koyukuk + (part) Kuskokwim + (part) Upper Yukon
05	Fairbanks Borough	Fairbanks Borough
06	Southeast Fairbanks	Southeast Fairbanks + (part) Upper Yukon
07	Wade Hampton	Wade Hampton
08	Bethel	Bethel + (part) Kuskokwim
09	Dillingham	Bristol Bay Division
10	Bristol Bay Borough	Bristol Bay Borough
11	Aleutian Islands	Aleutian Islands
12	Matanuska-Susitna Borough	Matanuska-Susitna Borough
13	Anchorage Borough	Anchorage Borough
14	Kenai Peninsula Borough	Kenai-Cook Inlet + Seward
15	Kodiak Island Borough	Kodiak Island Borough
16	Valdez-Cordova	Cordova-McCarthy + Valdez-Chitina-Whittier
17	Skagway-Yakutat-Angoon	Skagway-Yakutat + Angoon
18	Haines Borough	Haines Borough
19	Juneau Borough	Juneau Borough
20	Sitka Borough	Sitka Borough
21	Wrangell-Petersburg	Wrangell-Petersburg
22	Prince of Wales - Outer Ketchikan	Prince of Wales + Outer Ketchikan
23	Ketchikan Borough	Ketchikan Borough

TABLE I-2

CONVERSION OF 1970 CENSUS DIVISIONS TO CORRESPONDING 1980 CENSUS AREAS

1970 Division Code	1970 Census Divisions	Corresponding 1980 Census Areas (or Subareas)
01	Aleutian Islands	Aleutian Islands + (Chignik Subarea)
02	Anchorage	Anchorage Borough
03	Angoon	Angoon Subarea
04	Barrow-North Slope	North Slope Borough
05	Bethel	Lower Kuskokwim Subarea
06	Bristol Bay Borough	Bristol Bay Borough
07	Bristol Bay	Dillingham — (Chignik Subarea)
08	Cordova-McCarthy	Cordova Subarea + Copper River Subarea — (Nebesna Sub-subarea)
09	Fairbanks	Fairbanks North Slope Borough
10	Haines	Haines Borough + (Klukwan Subarea)
11	Juneau	Juneau Borough
12	Kenai-Cook Inlet	Kenai-Cook Inlet Subarea — (Hope Sub-subarea)
13	Ketchikan	Ketchikan Gateway Borough
14	Kobuk	Kobuk
15	Kodiak	Kodiak Island Borough
16	Kuskokwim	Aniak Subarea + (McGrath-Holy Cross Subarea)
17	Matanuska-Susitna Borough	Matanuska-Susitna Borough
18	Nome	Nome
19	Outer Ketchikan	Outer Ketchikan Subarea
20	Prince of Wales	Prince of Wales Subarea
21	Seward	Seward Subarea (Hope Sub-subarea)
22	Sitka	Sitka Borough (Port Alexander City)
23	Skagway-Yakutat	Hoonah-Yakutat Subarea Skagway Subarea
24	Southeast Fairbanks	Southeast Fairbanks— Eagle Subarea
25	Upper Yukon	Yukon Flats Subarea (Eagle Subarea)
26	Valdez-Chitina-Whittier	Prince William Sound Subarea parts of Copper River Subarea*
27	Wade Hampton	Wade Hampton
28	Wrangell-Petersburg	Wrangell-Petersburg — (Port Alexander City)
29	Yukon-Koyukuk	Koyukuk-Middle Yukon Subarea

* Consult the 1980 Geographic Area Classification Manual or Research and Analysis for further details.

Organized boroughs make up 11 of the 23 census areas. In the unorganized part of the state, an attempt was made to have census area or subarea boundaries approximate the boundaries of the Alaska Native Corporations, Rural Education Attendance areas, or other socioeconomic units of Alaska and/or previous census divisions.

A unique six digit code was developed by the Alaska Department of Labor for the 1980 census areas useful at the two, three, four or six digit level depending on the degree of refinement required by the user. A two digit code (01-23) was assigned to each census area beginning at the northernmost part of the state (North Slope Borough = 01) and continuing in numerical order from north to south and east to west ending in the southeastern part of the state (Ketchikan Gateway Borough = 23). A second set of two digit codes (31-95) was assigned to identify census subareas (or where no census subareas exist, the census area again). Each census area or census subarea was further divided into a maximum of nine smaller geographic units and coded one through nine (fifth digit). Finally, each place (city, town, or village) in Alaska recognized as an enumeration district with a population of at least 25 (1970 census) was assigned a sixth digit, one through nine.

Currently, only population information is available by 1980 census areas. Labor force data and nonagricultural wage and salary employment have not yet been converted from the 29 1970 census divisions. Conversion, is not expected before 1983. Tables I-1 and I-2 illustrate conversions between the two (1970 vs. 1980).

CHAPTER II POPULATION CHARACTERISTICS AND TRENDS

Alaska's population grew by nearly one third in the past decade, with very little change in the census division rank order. The fastest growth rate occurred in Matanuska-Susitna at 172.9 percent, primarily the result of spillover from Anchorage, while two census divisions, Bristol Bay Borough and Outer Ketchikan, experienced population declines. The decline in Outer Ketchikan resulted from loss of military population on Annette Island while the decline in Bristol Bay Borough may be attributed to natural migration. Tables II-1 and II-2 give the population change by area. (The difference between census divisions and census areas is explained in Area Description beginning on page 1).

The average number of persons per household declined in 1980 from 3.51 in 1970 to 2.93 persons. This is due to several factors, including an increase in the number of single person households, a higher divorce rate, longer life expectancy and lower birth rates.

Between 1970 and 1980 the population of the United States aged noticeably. In 1970 the median age was 28.0; by 1980 it was 30.0. A similar trend occurred in Alaska where the median age increased from 22.9 in 1970 to 26.1 in 1980. Alaska has the second lowest median age of all states. This supports the romantic frontier notion that Alaskans tend to be a much younger, hardier population than the rest of the country. The increased median age is attributed to a decline in births (which means fewer children in the population) coupled with continued aging of the "Baby Boom" generation born between 1945 and 1964. Table II-4 illustrates the changing age distribution.

In 1980, 53 percent of Alaskans were male, the highest percentage of any state. This compared to nearly 49 percent nationwide. Women comprised slightly more of Alaska's population in 1980 than in 1970 as the ratio increased from 44 percent to 47 percent. Nationwide there was very little change in the ratio of women to total population.

The racial breakout of Alaska's population changed slightly over the decade. A decrease in the population of whites to total population occurred. Whites comprised 78.8 percent of population in 1970; the proportion decreased to 77.0 percent in 1980. A higher concentration of white population occurs in Anchorage, where 85 percent of the people are white. The decrease in the distribution of whites to total population resulted in a corresponding increase of all other races. American Indian, Eskimo and Aleut comprise the next largest ethnic group in Alaska. Sixteen percent of all Alaskans are American Indian, Eskimo or Aleut, compared to 0.6 percent nationwide.

Alaska's population is projected to increase slightly less than five percent by 1983, to a total of 420,000 people. Assuming the characteristics distribution remains similar to 1980 characteristics, Table II-5 summarizes the number of people.

NOTE: Effective September 15, 1981, the following revisions to the 1980 Census of Population and Housing counts will appear in the tables of the final 1980 census reports for Alaska. These revised population and housing counts are subject to change pending the outcome of the various lawsuits concerning the census counts. For consistency, and lack of corresponding characteristics data preliminary figures for Alaska, Anchorage, Matanuska-Susitna and Southeast Fairbanks are used throughout this publication.

	Population	Housing
Alaska	401,851	162,825
Anchorage Borough	174,431	70,363
Anchorage census subarea	174,431	70,363
Anchorage city	174,431	70,363
Matanuska-Susitna Borough	17,816	10,098
Matanuska-Susitna census subarea	17,816	10,098
Southeast Fairbanks Census Area	5,676	2,450
Southeast Fairbanks census subarea	5,676	2,450

A detailed population publication will be available early in 1982.

TABLE II-1
Population
by 1970 Census Division

1970 Census Division	1970	1980	Percent Change 1970-1980	1980 Rank	1970 Rank
Aleutian Islands	8,057	8,290	2.9	9	7
Anchorage	126,333 *	173,017	37.0	1	1
Angoon	503	712	41.5	29	29
Barrow	2,885 *	3,320	15.1	19	19
Bethel	7,767 *	9,698	24.9	8	8
Bristol Bay Borough	1,147	1,094	4.6	28	28
Bristol Bay	3,485	4,094	17.5	18	17
Cordova-McCarthy	1,857	2,264	21.9	24	24
Fairbanks	45,864	53,983	17.7	2	2
Haines	1,504	1,815	20.7	25	27
Juneau	13,556	19,528	44.1	4	4
Kenai-Cook Inlet	14,250	22,473	57.7	3	3
Ketchikan	10,041	11,316	12.7	6	5
Kobuk	4,434	5,295	19.4	16	14
Kodiak	9,409	9,939	5.6	7	6
Kuskokwim	2,306	2,644	14.7	21	21
Matanuska-Susitna	6,509	17,766	172.9	5	9
Nome	5,749	6,537	13.7	11	11
Outer Ketchikan	1,676	1,333	20.5	27	26
Prince of Wales	2,106	2,489	18.2	23	23
Seward	2,336	2,809	20.3	20	20
Sitka	6,109	7,889	29.1	10	10
Skagway-Yakutat	2,157	2,631	22.0	22	22
Southeast Fairbanks	4,179	5,659	35.4	14	15
Upper Yukon	1,684	1,775	5.4	26	25
Valdez-Chitina-Whittier	3,098	6,042	95.0	13	18
Wade Hampton	3,917	4,665	19.1	17	16
Wrangell-Petersburg	4,913	6,081	23.8	12	12
Yukon-Koyukuk	4,752	5,323	12.0	15	13
State Total	302,583 *	400,481	32.4	—	—

* Revised, corrected counts to the 1970 Census of Population.

Source: Alaska Department of Labor, State Demographer.

TABLE II-2
Population
By 1980 Census Areas

1980 Census Area	1970 Population	1980 Population	Percent Change 1970-1980	1970 Rank	1980 Rank
Aleutian Islands C.A.	7,834	7,768	0.8	8	12
Anchorage Br.	126,385	173,017	36.9	1	1
Bethel C.A.	8,917	10,999	23.4	7	7
Bristol Bay Br.	1,147	1,094	4.6	23	23
Dillingham C.A.	3,872	4,616	19.2	18	18
Fairbanks North Star Br.	45,864	53,983	17.7	2	2
Haines Br.	1,401	1,680	19.9	22	22
Juneau Br.	13,556	19,528	44.1	4	4
Kenai Peninsula	16,586	25,282	52.4	3	3
Ketchikan Gateway Br.	10,041	11,316	12.7	5	6
Kobuk C.A.	4,048	4,831	19.3	16	16
Kodiak Island Br.	9,409	9,939	5.6	6	8
Matanuska-Susitna Br.	6,509	17,766	172.9	10	5
Nome C.A.	5,749	6,537	13.7	12	13
North Slope Borough	3,451	4,199	21.7	20	19
Prince of Wales- Outer Ketchikan C.A.	3,782	3,822	1.1	19	20
Sitka Borough	6,073	7,803	28.5	11	11
Skagway-Yakutat-Angoon C.A.	2,763	3,478	25.9	21	21
Southeast Fairbanks C.A.	4,326	5,770	33.4	15	15
Valdez-Cordova C.A.	4,965	8,348	68.1	13	9
Wade Hampton C.A.	3,917	4,665	19.1	17	17
State Total	302,583 *	400,481	32.4	—	—

* Revised, corrected counts to the 1970 Census of Population.

Source: Alaska Department of Labor, State Demographer.

TABLE II-3
PERSONS PER HOUSEHOLD
ALASKA 1980 CENSUS AREAS

	PERSONS IN HOUSEHOLDS	PERSONS IN GROUP QUARTERS	HOUSE-HOLDS	PERSONS PER HOUSE-HOLD
ALASKA	384,275	16,206	131,068	2.93
ALEUTIAN ISLANDS	5,220	2,548	1,598	3.27
ANCHORAGE	168,169	4,848	60,042	2.80
BETHEL	10,881	118	2,684	4.05
BRISTOL BAY	755	339	246	3.07
DILLINGHAM	4,616	—	1,214	3.80
FAIRBANKS NORTH STAR	50,644	3,339	18,224	2.78
HAINES	1,675	5	372	2.93
JUNEAU	19,255	273	7,035	2.74
KENAI PENINSULA	24,962	320	8,546	2.92
KETCHIKAN GATEWAY	10,984	332	3,985	2.76
KOBUK	4,783	48	1,140	4.20
KODIAK ISLAND	9,258	681	3,027	3.06
MATANUSKA—SUSITNA	17,442	324	5,699	3.06
NOME	6,449	88	1,741	3.70
NORTH SLOPE	3,834	365	980	3.91
PRINCE OF WALES- OUTER KETCHIKAN	3,646	176	1,121	3.25
SITKA	7,436	367	2,440	3.05
SKAGWAY-YAKUTAT-ANGOON	3,386	92	1,087	3.11
SOUTHEAST FAIRBANKS	5,371	399	1,699	3.16
VALDEZ-CORDOVA	7,646	702	2,689	2.84
WADE HAMPTON	4,610	55	947	4.87
WRANGELL-PETERSBURG	5,994	173	2,072	2.89
YUKON-KOYUKUK	7,259	614	2,280	3.18

Source: 1980 Census data.

TABLE II-4
ALASKA POPULATION DISTRIBUTION 1/
BY AGE AND SEX
1970 and 1980

	1970			1980		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
TOTAL NUMBER	300,382	163,258	137,124	400,481	212,321	188,160
TOTAL PERCENT	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 Years	10.7	10.1	11.4	9.7	9.4	10.0
5 to 9 Years	12.2	11.5	13.1	8.7	8.4	9.0
10 to 14 Years	11.4	10.7	12.2	8.5	8.3	8.8
15 to 19 Years	8.9	8.7	9.2	9.2	9.3	9.2
20 to 24 Years	11.8	13.7	9.6	11.3	11.4	11.1
25 to 29 Years	8.9	8.7	9.2	12.1	12.0	12.2
30 to 34 Years	7.5	7.5	7.6	10.5	10.6	10.3
35 to 39 Years	6.8	7.0	6.7	7.8	8.0	7.5
40 to 44 Years	5.8	6.0	5.6	5.6	5.8	5.4
45 to 49 Years	5.0	5.1	5.0	4.6	4.7	4.5
50 to 54 Years	3.9	4.0	3.9	4.0	4.1	3.8
55 to 59 Years	2.8	3.0	2.7	3.1	3.2	3.1
60 to 64 Years	1.8	1.8	1.7	2.0	2.0	2.0
65 to 69 Years	1.0	1.1	1.0	1.3	1.3	1.3
70 to 74 Years	0.5	0.5	0.5	0.8	0.7	0.8
75 Years and Over	0.7	0.7	0.7	0.8	0.7	0.9

1/ Available by "White," "Black," and "Other" Races upon request.

Source: 1970 and 1980 Census data.

TABLE II-5
ALASKA POPULATION CHARACTERISTICS

	1980	1983
TOTAL	400,481	420,000
Male	212,321	222,700
Female	188,160	197,300
Age		
0-19	144,840	153,000
20-21	17,274	19,600
22-44	171,994	176,700
45-54	34,156	35,900
55 and Over	32,217	34,800
Race		
White (Non Hispanic)	300,748	316,100
Black (Non Hispanic)	13,235	13,900
Hispanic	9,497	9,900
American Indian, Eskimo, Aleut	64,047	65,200
Asian, Pacific Islander	8,035	8,400
Number of Persons = 25 **years, completed High School**	166,360	167,000
Male Veterans	61,200	62,200

Source: Alaska Department of Labor, State Demographer; Age and Race detail derived from official 1980 Census data; Characteristics data (eg., male vets, etc.) derived using 1970 Census data, 1975 Survey of Income and Education and available 1980 Census data.

CHAPTER III LABOR FORCE

DEFINITION

The civilian labor force includes all noninstitutionalized persons over 16 years who are working or actively seeking work. To be employed a person must have worked at least one hour for pay or profit or at least 15 unpaid hours in a family business during the survey week (week of the month containing the 12th). A person is also considered employed if they have a job but are not working because they are on vacation, involved in a labor dispute, ill, taking time off for personal reasons, or have been prevented from working due to bad weather. A person is classified as unemployed if they do not have a job, but are available and have actively sought work at any time during the past four weeks. A person is also considered unemployed if waiting to be recalled from a layoff or waiting to report to a new job within 30 days. The remainder of the population that do not fit either of these criteria are considered out of the labor force. They are either discouraged workers, who have given up seeking work because they do not believe any work is available, or individuals voluntarily not part of the labor force such as students, retirees, and housewives.

Resident employment, used to compute labor force, differs conceptually from nonagricultural wage and salary employment, which measures employment by *place of work*. Resident employment, which uses adjusted nonagricultural employment as input, includes self-employed individuals, domestic workers and agricultural workers (excluding seafood harvesters) and reflects employment by *place of residence*. Employment by *place of work* is essentially an estimate of the number of jobs filled in the survey week in a given area while employment by *place of residence* is essentially an estimate of the number of persons employed who live in a given area. These two series are derived by separate methodologies and no attempt should be made to relate the two.

The unemployment rate is the number of unemployed divided by total civilian labor force.

CURRENT ESTIMATING PROCEDURES

Current labor force estimating procedures are established by the Bureau of Labor Statistics. The procedure includes estimates for employment and unemployment. These estimates, computed by the Alaska Department of Labor, are controlled by the monthly Bureau of Census household-based Current Population Survey (CPS) results at the statewide level (See CURRENT POPULATION SURVEY). This adjustment ensures standardized unemployment rates that are comparable between states. It also introduces a sampling error range associated with the rate. The household sample used in Alaska is small and is calculated to ensure (on an annual basis) that nine out of ten times, separate surveys would produce unemployment rates with a maximum expected coefficient of variation of ten percent at a six percent unemployment rate.

Several sources of data are used by the Department of Labor to develop monthly employment estimates. Primary source for estimated employment is the monthly employer survey (also called the Establishment Survey) by the Current Employment Statistics (CES) program which generates nonagricultural employment estimates by *place of work*. This estimate is then adjusted by 1970 Census of Population residency factors to produce employment by *place of residence*. CES data are extrapolated and augmented with 1970 Census of Population employment ratios to estimate categories of employment excluded from CES data, such as self-employed individuals, domestic workers, agricultural workers (excluding seafood harvesters). Statewide employment is distributed to regional levels using "Handbook" procedures. (See Glossary). It is then disaggregated to the census divisions using population ratios.

Unemployment estimates are developed from unemployment insurance (UI) claims data and 1970 Census of Population characteristics. UI claims data provide current information about unemployed who have had recent employment experience. These data are supplemented by special survey based estimates of new entrants and re-entrants to the labor force. Discouraged workers are excluded from the estimated unemployed. Disaggregation of experienced unemployment to the census division is based upon current UI claims data.

Once each year labor force data are revised to include most recent actual employment figures. This annual updating process is called benchmark. The Alaska Department of Labor revises labor force data for the most recent five years to also include corrections when necessary. Based upon the current 1980 benchmark, the labor force data series is technically inconsistent prior to 1976. However, data back to 1975 can be used with little disruption to the series. Prior to 1975 there were definitional and procedural changes to labor force data that result in an inconsistent series.

CURRENT POPULATION SURVEY

(CPS) The Current Population Survey is a monthly survey of approximately 60,000 nationwide households conducted by the Bureau of Census for the Bureau of Labor Statistics. Data collected are based on the activity or labor force status reported for the calendar week including the 12th of the month. The CPS household survey differs from the Current Employment Statistics (CES) establishment survey which provides industry information on nonagricultural wage and salary employment, average weekly hours, average hourly and weekly earnings and labor turnover. The household and establishment surveys supplement one another by providing types of data not easily gathered collectively. Data from these two different sources differ in definition, coverage, source, and method of collection. A detailed analysis of the two surveys is included in each issue of Employment and Earnings, a Bureau of Labor Statistics publication which summarizes current monthly survey results.

In Alaska, approximately 1,050 households representing twelve census divisions are assigned to be surveyed each month; approximately 750 households are actually surveyed in any given month. Survey results are used to adjust monthly labor force estimates for Alaska. Each year the Bureau of Labor Statistics publishes a summary of CPS data by state. Table III-3 summarizes selected characteristics of Alaska's labor force participants. While CPS data are the most current available labor force characteristics, detailed labor force data will also be available from the 1980 Census of Population.

According to CPS, 71 percent of Alaska's 1980 noninstitutional population was in the labor force. The participation rate was strikingly different for whites (75 percent) and non-whites (54 percent). Disparity is probably due to the large native bush population. Many bush residents are not in the labor force because of a lack of available work. The white population, being proportionately more urban, participates more heavily in the labor force. Men also participate more heavily than do women (82 to 61 percent), and people 20 years or older more so than those age 16 to 19 years.

TABLE III-1
CURRENT POPULATION SURVEY
1980 ANNUAL AVERAGE
LABOR FORCE PARTICIPATION RATES
AND
UNEMPLOYMENT RATES

Alaska	Civilian Noninstitutional Population (In Thousands)	Civilian Labor Force Participation Rate (% of Population)	Employment Participation Rate % of Population	Unemployment Rate % of Labor Force	Error Range of Unemployment Rate
Total	262	71.3	64.5	9.6	8.7 - 10.4
Men	130	82.2	73.9	10.1	9.0 - 11.2
Women	132	60.6	55.2	8.8	7.6 - 10.0
Men, 20 Years and Over	117	85.4	77.5	9.2	8.1 - 10.3
Women, 20 Years and Over	118	61.5	56.8	7.7	6.6 - 8.9
Both Sexes, 16-19 Years	27	53.3	42.1	20.9	17.2 - 24.7
White	213	75.4	68.9	8.6	7.8 - 9.4
Men	107	87.5	79.7	9.0	7.9 - 10.1
Women	106	63.0	58.0	8.0	6.8 - 9.3
Men, 20 Years and Over	97	90.2	82.8	8.2	7.1 - 9.3
Women, 20 Years and Over	95	63.7	59.1	7.1	5.9 - 8.3
Both Sexes, 16-19 Years	20	58.7	47.5	19.2	15.1 - 23.2
Black and Other	49	54.0	45.7	15.4	12.8 - 17.9
Men	23	57.9	47.6	17.8	14.0 - 21.6
Women	26	50.5	44.0	12.8	9.4 - 16.2
Men, 20 Years and Over	20	61.6	51.5	16.4	12.5 - 20.3
Women, 20 Years and Over	22	52.3	46.5	11.1	7.6 - 14.5
Single (never married)	68	70.9	58.9	17.0	15.1 - 19.0
Married, spouse present	155	70.7	66.1	6.5	5.6 - 7.4
Men, spouse present	72	87.1	82.0	5.9	4.8 - 7.0
Women, spouse present	83	56.6	52.5	7.3	5.9 - 8.7

ALASKA'S CURRENT SITUATION

A summary of the first nine months of 1981 indicates an improved unemployment picture in Alaska. Resident employment has been nearly four percent above last year as an indication of Alaska's overall economic expansion. While high interest rates and weak foreign demand for Alaska wood products have seriously curtailed employment in Southeast Alaska, massive revenues from oil production in Prudhoe Bay have been financing spending and lending programs that have bolstered employment in nearly all other Alaska industries. Renewed construction activity, another exceptional salmon harvest and oil related mining have all contributed to this year's strong employment growth. The ranks of unemployed actually declined by an estimated three percent through September, resulting in a nine month average unemployment rate of 9.2 percent. As Alaska's seasonal activity draws to a close after September, the 1981 annual average unemployment rate is expetced to be slightly higher.

LABOR FORCE EXPECTIONS THROUGH 1983

The unemployment rate is not expected to change significantly from the 1980 average of 9.6 percent. This outlook assumes no major projects will begin prior to 1983. Alaska's increasing population will keep pace with continued job expansion. While employment is predicted to increase in all major industries, the largest increases are expected in mining, retail trade and service industries. Increased employment is predicted to result in more, not fewer unemployed Alaskans. Inmigration and entry of previously discouraged workers to the labor force are expected to increase competition for jobs. As recession in the rest of the country leaves thousands of workers unemployed, Alaska, renown as the Last Frontier and the Land of Opportunity may begin to appear more attractive. Lack of local employment prospects combined with widespread publicity about large private and public expenditures, budget surpluses, and liberal loan programs may encourage individuals to relocate to Alaska. Alaska should have a surplus of workers in all but a few highly technical occupations. Persons interested in relocating are advised to consult local Employment Service offices and carefully plan any relocation effort before actually moving. See MAJOR PROJECT UPDATE for occupational employment highlights and the status of several prospective projects.

Because unemployment rates are a function of population and labor force participation, expanding employment may not necessarily result in a decreased unemployment rate, although such was the case during the first nine months of 1981.

ALASKA UNEMPLOYMENT COMPARED TO OTHER STATES

Alaska's unemployment which is characterized by highly seasonal activity is traditionally higher than the rest of the nation. Only once during the last six years did Alaska's annual average unemployment rate (not seasonally adjusted) drop below the national average rate. With pipeline construction underway, Alaska's unemployment rate was 1.6 percentage points lower than the national average in 1975. Despite pipeline activity, Alaska's unemployment rate was above the national average by the end of 1976 as inmigration resulted in an expanded labor force; however, several states had higher unemployment rates. In 1977, Alaska had an annual average unemployment rate of 9.4 percent, equal to New Jersey, for the highest rates in the United States. In 1978, Alaska's rate of 11.2 percent was the nation's highest. This situation was not repeated in 1980 as layoffs in the auto and steel industries pushed Michigan's rate to 12.6 percent, far above any other state. Alaska and Indiana experienced 9.6 percent annual average unemployment rates which were still the second highest in the nation.

Preliminary 1981 estimates indicate that Michigan and West Virginia had the nation's highest unemployment rates during the first half of the year. Alaska's unemployment rate ranged from second highest in January to eighth highest in June. In both Oregon and Washington, where employees in logging and the wood products industry have been hard hit by persistently high interest rates, April and May unemployment rates exceeded Alaska's. Toward the latter half of 1981, Alaska's rate slipped even lower. By August, eleven states had unemployment rates above Alaska's 8.1 percent (not seasonally adjusted). Alaska's rate is expected to increase after September when seasonal activity declines. While it will not be the nation's highest rate, it will still be among the highest in the country at a time during which all but Alaska experiences recession.

TABLE III-2
ANNUAL AVERAGE
Unemployment Rate
(Not Seasonally Adjusted)

	ALASKA	UNITED STATES
1975	6.9	8.5
1976	8.4	7.7
1977	9.2	7.0
1978	11.0	6.0
1979	9.4	5.8
1980	9.6	6.6

Benchmark 1980

TABLE III-3
ALL STATES LABOR FORCE DATA
ANNUAL AVERAGE 1980
(In Thousands)

	Civilian Labor Force	Employment	Unemployment Number	Unemployment Percent of Labor Force
	1980p	1980p	1980p	1980p
United States	104,719	97,270	7,448	7.1
Northeast	23,119	21,473	1,646	7.1
New England	6,177	5,809	368	6.0
Connecticut	1,616	1,520	95	5.9
Maine	500	461	39	7.7
Massachusetts	2,893	2,731	163	5.6
New Hampshire	461	439	22	4.7
Rhode Island	462	429	33	7.2
Vermont	245	230	16	6.4
Middle Atlantic	16,942	15,664	1,278	7.5
New Jersey	3,582	3,323	258	7.2
New York	7,992	7,388	603	7.6
Pennsylvania	5,368	4,950	417	7.8
South	33,118	30,990	2,128	6.4
South Atlantic	16,385	15,344	1,041	6.4
Delaware	280	258	22	7.7
District of Columbia	317	294	23	7.2
Florida	3,925	3,691	234	6.0
Georgia	2,385	2,231	154	6.4
Maryland	2,133	1,996	137	6.4
North Carolina	2,741	2,561	180	6.6
South Carolina	1,306	1,216	90	6.9
Virginia	2,530	2,401	129	5.1
West Virginia	768	696	72	9.4
East South Central	6,301	5,805	496	7.9
Alabama	1,642	1,498	144	8.8
Kentucky	1,621	1,489	131	8.1
Mississippi	1,023	947	76	7.5
Tennessee	2,015	1,870	145	7.2
West South Central	10,432	9,841	590	5.7
Arkansas	972	898	74	7.6
Louisiana	1,723	1,608	115	6.7
Oklahoma	1,325	1,261	64	4.8
Texas	6,412	6,075	337	5.3
North Central	28,333	26,011	2,322	8.2
East North Central	19,852	18,009	1,843	9.3
Illinois	5,447	4,992	454	8.3
Indiana	2,620	2,368	253	9.6
Michigan	4,298	3,757	541	12.6
Ohio	5,066	4,659	426	8.4
Wisconsin	2,401	2,232	169	7.0
West North Central	8,481	8,002	479	5.6
Iowa	1,449	1,366	83	5.7
Kansas	1,198	1,145	53	4.4
Minnesota	2,116	1,996	120	5.7
Missouri	2,295	2,134	161	7.0
Nebraska	777	745	31	4.0
North Dakota	309	294	15	4.9
South Dakota	337	322	16	4.7

TABLE III-3
ALL STATES LABOR FORCE DATA
ANNUAL AVERAGE 1980
(In Thousands)
(Continued)

	Civilian Labor Force	Employment	Unemployment Number	Unemployment Percent of Labor Force
West	20.125	18.757	1.368	6.8
Mountain	5.156	4.834	322	6.2
Arizona	1.126	1,051	75	6.7
Colorado	1.474	1,391	82	5.6
Idaho	424	390	33	7.9
Montana	374	352	22	6.0
Nevada	376	353	23	6.2
New Mexico	543	502	40	7.4
Utah	607	570	38	6.2
Wyoming	232	223	9	3.9
Pacific	14,969	13,923	1.046	7.0
Alaska	187	169	18	9.6
California	11.203	10.443	760	6.8
Hawaii	400	380	20	5.0
Oregon	1,271	1.166	105	8.2
Washington	1,908	1,765	143	7.5
Massachusetts	2,893	2,731	163	5.6

p: Provisional. Regional and State estimates are subject to revision based on revised estimates of the population from the 1980 Census of Population.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

GRAPH III-1
ALASKA AND U.S. UNEMPLOYMENT RATE NOT SEASONALLY ADJUSTED

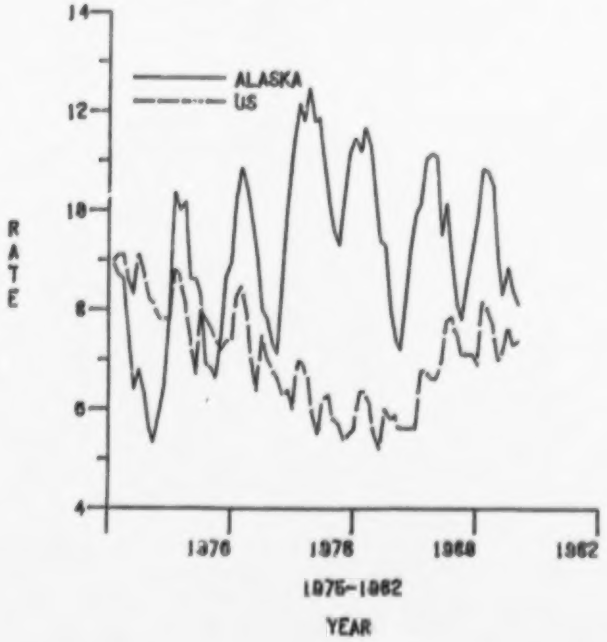


TABLE III-4
CIVILIAN LABOR FORCE, EMPLOYMENT
UNEMPLOYMENT AND UNEMPLOYMENT RATE 1/
ALASKA
1975-1981

		Civilian Labor Force	Employment	Unemployment Number	Unemployment Rate
1981	January	177,994	158,507	19,487	10.9
	February	181,769	162,058	19,711	10.8
	March	184,990	165,564	19,426	10.5
	April	188,389	171,383	17,006	9.0
	May	193,003	176,978	16,025	8.3
	June	202,785	184,806	17,979	8.9
	July	207,752	190,353	17,399	8.4
	August	203,478	187,150	16,328	8.0
	September	198,956	183,119	15,837	8.0
1980	January	168,008	150,899	17,109	10.2
	February	174,153	154,735	19,418	11.1
	March	178,277	158,336	19,941	11.2
	April	186,785	166,061	20,724	11.1
	May	191,229	172,970	18,259	9.5
	June	196,038	176,100	19,938	10.2
	July	199,188	181,259	17,929	9.0
	August	199,188	182,958	16,230	8.1
	September	192,803	177,806	14,997	7.8
	October	191,270	174,853	16,417	8.6
	November	185,053	168,089	16,964	9.2
	December	182,009	163,934	18,075	9.9
	Annual Average	187,000	169,000	18,000	9.6
1979	January	168,027	149,209	18,818	11.2
	February	170,896	150,930	19,966	11.7
	March	174,318	154,658	19,658	11.3
	April	177,622	159,218	18,404	10.4
	May	184,165	166,809	17,356	9.4
	June	189,265	171,747	17,518	9.3
	July	192,181	176,743	15,438	8.0
	August	191,495	177,304	14,191	7.4
	September	187,267	173,743	13,524	7.2
	October	182,444	167,566	14,878	8.2
	November	178,485	161,825	16,660	9.3
	December	175,837	158,249	17,588	10.0
	Annual Average	181,000	164,000	17,000	9.4
1978	January	168,794	148,263	20,531	12.2
	February	171,119	150,988	20,131	11.8
	March	176,433	154,461	21,972	12.5
	April	180,547	159,325	21,222	11.8
	May	186,506	164,383	22,123	11.9
	June	190,536	169,623	20,913	11.0
	July	188,071	169,160	18,911	10.1
	August	188,050	170,069	17,981	9.6
	September	184,895	167,667	17,228	9.3
	October	182,344	163,633	18,711	10.3
	November	178,688	158,623	20,065	11.2
	December	176,018	155,805	20,213	11.5

TABLE III-4
CIVILIAN LABOR FORCE. EMPLOYMENT UNEMPLOYMENT AND UNEMPLOYMENT RATE 1/
ALASKA
1975-1981

	Annual Average	181,000	161.000	20,000	11.0
1977	January	158,004	141,724	16,280	10.3
	February	163,420	145,669	17,751	10.9
	March	168,157	150,689	17,468	10.4
	April	174,392	157,312	17,080	9.8
	May	180,607	163,998	16,609	9.2
	June	183,120	168,391	14,729	8.0
	July	182,381	168,116	14,265	7.8
	August	180,738	167,630	13,108	7.3
	September	179,248	166,438	12,810	7.1
	October	175,364	160,330	15,034	8.6
	November	172,026	154,365	17,661	10.3
	December	170,542	151,339	19,203	11.3
	Annual Average	174,000	158,000	16.000	9.2
1976	January	147,758	132,346	15,412	10.4
	February	152,428	137,208	15,220	10.0
	March	159,661	143,445	16,216	10.2
	April	163,072	149,002	14,070	8.6
	May	171,510	156,799	14,711	8.6
	June	177,350	162,686	14,664	8.3
	July	180,228	167,839	12,389	6.9
	August	183,174	170,736	12,438	6.8
	September	178,923	167,141	11,782	6.6
	October	168,933	156,322	12,611	7.5
	November	163,693	149,371	14,322	8.7
	December	157,270	143,105	14,165	9.0
	Annual Average	167,000	153,000	14,000	8.4
1975	January	128,278	116,964	11,314	8.8
	February	133,759	122,246	11,513	8.6
	March	140,793	128,814	11,979	8.5
	April	150,865	139,472	11,393	7.6
	May	156,263	146,327	9,936	6.4
	June	163,817	152,775	11,042	6.7
	July	167,795	157,296	10,499	6.3
	August	173,965	164,289	9,676	5.6
	September	171,797	162,330	8,967	5.2
	October	168,917	158,985	9,932	5.9
	November	163,122	152,505	10,617	6.5
	December	153,198	141,067	12,131	7.9
	Annual Average	156,048	145,298	10.750	6.9

1/ To conform to federal legislation, all prior year labor force data is adjusted to be consistent with the CPS annual averages for each state. This is not possible for current year estimates until the completion of the year. Because of this, the estimating methodology required for the current year's estimates is not strictly comparable to prior year's data.

CHAPTER IV
NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT

INTRODUCTION

Confusion often arises over two basic types of employment data available. Highlighted in Table IV-1 are different employment definitions and sources.

DEFINITION

Nonagricultural wage and salary employment is an estimate of the number of nonagricultural wage and salary jobs by *place of work*. Nonagricultural employment differs conceptually from resident employment which estimates the number of persons employed by *place of residence*. Resident employment includes estimates for employed groups specifically excluded from nonagricultural employment such as, all self-employed persons, unpaid family workers, domestics and most persons employed in agricultural (excluding seafood harvesting jobs).

Nonagricultural data appear in two Alaska Department of Labor publications, the ALASKA ECONOMIC TRENDS and the STATISTICAL QUARTERLY. There are some subtle differences between these two series.

Nonagricultural employment data published each month in ALASKA ECONOMIC TRENDS are estimates based on a sample of employer establishments throughout the state. Estimates are produced from the Bureau of Labor Statistics Current Employment Statistics (BLS-790) program. These employment estimates are prepared to provide current nonagricultural employment statistics because of the six month lag in publication of the STATISTICAL QUARTERLY. Data are also used to produce nationwide employment estimates for use as current economic indicators.

Nonagricultural employment in the STATISTICAL QUARTERLY publication is primarily derived from quarterly reports of employers subject to state and federal unemployment insurance laws. Some nonagricultural employment is not covered by unemployment insurance. To more accurately depict total nonagricultural employment, estimates are made for elected, religious and appointed officials.

TABLE IV-1

TYPES OF EMPLOYMENT

	RESIDENT EMPLOYMENT	CURRENT POPULATION SURVEY EMPLOYMENT
Description	Estimated number of persons employed by place of residence	Estimates of characteristics of resident employment
Responsible Agency	Alaska Department of Labor Research & Analysis using Bureau of Labor Statistics methodology	U.S. Department of Labor Bureau of Labor Statistics
Source of Data	Residency adjusted CES employment. CES data are one of the inputs into a 43 step procedure whose results are adjusted by the CPS control of total employment. This CPS adjustment ensures comparability between states. Labor force employment by place of residence includes nonagricultural employment and estimates for domestics, agricultural workers, self-employed and unpaid family workers.	Estimates are based on a monthly survey of approximately 750 households in Alaska conducted by the U.S. Bureau of Census for the BLS.
Time Period	Monthly One month lag	Monthly One month lag
Industry Detail	None	Major Industry Total employment (monthly) Characteristics by industry (annually)
Geographic Distribution	Alaska 6 Estimating Regions 29 census divisions	Alaska
Published in:	*Alaska Economic Trends*	*Geographic Profile of Employment and Unemployment* BLS New Releases

Employment measured by both series is the number of people who worked during the employer's pay period including the 12th of each month. This count more accurately depicts the number of jobs as opposed to the number of individual workers. It is not an unduplicated count of the number of different individuals because some workers are reported by more than one employer due to dual job holding and labor turnover. The series do not distinguish between workers in part-time and full time jobs.

A definitional discrepancy occurs between the two series in educational state and local government. STATISTICAL QUARTERLY data exclude those government education workers who are on a 12 month contract but not working during the summer months, while the ALASKA ECONOMIC TRENDS monthly estimates includes them. Current monthly estimates are produced for six labor market areas while actual UI covered nonagricultural employment is published for each of Alaska's 29 census divisions. STATISTICAL QUARTERLY data, reflecting actual nonagricultural employment are unrounded while ALASKA ECONOMIC TRENDS current monthly nonagricultural employment estimates are published rounded.

Once each year, Research and Analysis benchmarks current monthly nonagricultural employment estimates. During this process, the most recent STATISTICAL QUARTERLY data are substituted for the estimates. The most recent benchmark data is footnoted March 1980 Benchmark but actually contain STATISTICAL QUARTERLY data through June 1980.

TYPES OF EMPLOYMENT

	NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT (Current Employment Survey - CES)	NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT *(Statistical Quarterly)*
Description	Estimated number of employed workers by place of work; a job count as opposed to a person count because it counts multiple job holders at each job.	Actual number of workers employed during a UI covered employer's payroll period that contains the week of the 12th of each month. Also considered a job count as opposed to a person count.
Responsible Agency	Alaska Department of Labor Research & Analysis using BLS methodology	Alaska Department of Labor, Research & Analysis
Source of Data	Sample survey of employers which produces estimates of the number of workers employed during the week of the 12th of each month. The Current Employment and Statistics program is often called the establishment survey. It includes estimates for non UI covered employment.	Quarterly reports submitted by em—ployers subject to state and federal UI laws. To more accurately depict total nonagricultural employment, estimates are made for the following noncovered types of employment: railroad; religious, elected and appointed officials.
Time Period	Monthly One month lag	Once each quarter, monthly employment 5-6 month lag.
Industry Detail	Major industry	2 and some 3 digit SIC
Geographic Distribution	Alaska, Anchorage, Fairbanks and the Anchorage-MatSu, Interior Gulf Coast and Southeast regions.	Alaska 29 Census Divisions
Published in:	*Alaska Economic Trends*	*Statistical Quarterly*

INDUSTRY EMPLOYMENT FORECAST THROUGH 1983

OVERVIEW

The Alaska Department of Labor has an econometric model (LABMOD) which uses *Statistical Quarterly* data to forecast annual average employment by industry. Data are then rounded and presented in Table IV-1. The forecast includes *Statistical Quarterly* data through September 1980.

Increased investment by the oil and metal mining industries as well as continued high state expenditure levels are expected to support an annual employment growth rate of 4 percent over the next two years. Nearly 15,000 new jobs will be created by 1983 when total nonagricultural wage and salary employment will reach 192,900. This represents a significant change from the relatively sluggish 1978 through 1980 period when only 6,000 jobs were added to the state's labor market.

Following oil pipeline construction was a period of uncertainty as the state experienced a generally overbuilt condition. This has given way to a new period of economic growth fueled by energy development and increasing expenditure of state petroleum revenues which are expected to exceed $4.3 billion by fiscal year 1983. Oil company investments for exploration and increased field productivity will be the major source of the net gain in new private sector jobs. State government expenditures will be the major source of new public sector jobs, and will also have a pervasive impact on the private sector. Not only will employment increase as the result of direct state supported jobs but state programs and capital expenditures will effect private construction, local government funding and residents' disposable income. Direct construction employment resulting from large capital projects budgets authorized during the last two years will have the largest impact. Additional capital expenditures of this magnitude are anticipated throughout the forecast period. A time lag occurs between appropriation and employment increases. For example, many 1980 appropriations have not yet fully impacted the economy due to design and federal funding delays. Subsidized interest rates on state loans for homes and businesses, reduced and eliminated taxes, and direct transfers to residents will all have a positive influence on private sector employment. State revenue sharing and municipal assistance programs will support local government employment and construction.

Support industries, such as trade and transportation, will benefit from the oil-based growth. Finance, insurance and real estate employment will be the fastest growing support sector over the next two years, with wholesale and retail trade employment not far behind. The support sector is also influenced by tourist spending, which is expected to remain strong especially in service (hotels), transportation and retail industries.

A real increase in the state's petroleum revenues is uncertain in light of recent U.S. Department of Energy forecasts and anticipated oil production. However, spending of backlogged appropriations and lagged secondary impacts will cause real growth during most of the first half of the decade and provide an underlying stability during the rest of the 1980's.

ASSUMPTIONS AND CAVEATS

This employment forecast is based upon historical nonagricultural wage and salary employment data.

Areas of uncertainty in this forecast are major project impacts, federal government expenditures or cutbacks, fish catches and interest rates. The employment impact of major projects is, for the most part, excluded from this forecast. Federal government civilian employment is assumed to remain steady. Interest rates are expected to decline during the forecast period. Fish processing employment is related to fish catches and assumed to remain at 1981 levels.

Construction of the Northwest Alaskan Natural gas pipeline is currently very uncertain and therefore is assumed not to have any appreciable impact through 1983. Financing this more than $30 billion project depends upon congressional approval of waivers and acceptable financial risks to investors. High interest rates, the high projected price of delivered Alaska gas and the sheer size of the project make for complicated financial hurdles. Peak construction employment would likely exceed 13,000 workers. For more details on employment impacts expected to occur from this project see **Major Project Update** beginning on page 34.

TABLE IV-2
ALASKA
NONAGRICULTURAL EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE

	1980 Actual/1	1981 Projection	1982 Projection	1983 Projection
Total Employment	169.600	178.000	185,900	192.900
Mining	6.500	7,200	8.000	9.000
Construction	10.600	12.300	13,200	13.600
Manufacturing	13,900	13.200	13.800	14.400
Trans./Comm/ Utilities	17.100	17.600	18.000	18.500
Transportation	11.300	11,800	12.100	12.400
Communication	4.400	4.300	4.300	4.500
Utilities	1.400	1.500	1.600	1.600
Trade	29,400	31,500	32.900	34,200
Wholesale	5.500	5,800	6.300	6,600
Retail	23.900	25,700	26,600	27,600
Finance/Ins./Real Estate	7.800	8.400	8.700	9,200
Services	29.600	31,300	32.900	34.100
Civilian Government	53.900	55.800	57.600	59.200
Federal	18.000	17.800	17.900	18.000
State	15.300	16,200	17.100	18.000
Local	20.600	21.800	22.600	23.200
Miscellaneous	800	700	700	700

1 1980:4 Estimated.

Source: Alaska Department of Labor. Research and Analysis (ES 202 Federal Report of Employment and Wages. BLS 790 Current Employment Statistics and LABMOD Projections).

NOTE: Use of data from third quarter 1980 ES 202 reports, definitional differences, and rounding procedures have resulted in some discrepancies between the employment estimates contained in this forecast and the employment estimates in the Appendix.

Petrochemical employment impacts are also not likely to occur in the near term. An oil price level above $40 per barrel (in 1981 dollars) is a stated requirement for economic feasibility of the Dow-Shell petrochemical facility. Recent forecasts of oil prices by the Department of Energy and Saudi Arabia suggest that real increases in oil prices will likely be slight over the course of the decade as the result of conservation and increased production. Political volatility in many oil producing areas of the world make long term forecasts uncertain. Gas liquid processing is unlikely during the near term. See page 35 for more details on potential petrochemical employment.

Other major projects excluded from this forecast are the new capital city construction, and coal extraction and processing at the Beluga and Bering River coal fields. The U.S. Borax molybdenum mine near Ketchikan will likely impact employment somewhat during this pre-construction phase and is included in this forecast. Major construction is not expected before 1984 and is discussed in greater detail on page 37.

Federal government budget cutbacks in some sectors, combined with increased military expenditures make the total impact of federal spending in Alaska uncertain during the forecast period. With total federal expenditures in Alaska for federal fiscal year 1980 exceeding $2 billion and total active duty military exceeding 22,000 the importance of changes in these figures cannot be overlooked. It is assumed that total real federal expenditures for civilian and military will remain stable through 1983.

Because employment figures do not include those actually fishing, the impact associated with fishing expenditures appears in the seafood processing industry. Prediction of fish catch is difficult. The 1981 salmon catch was over 45 percent higher than published forecasts prepared by the Alaska Department of Fish and Game (ADFG). The 1982 harvest levels used in the forecast are those prepared by ADFG and reflect a harvest level approximately the same as for 1982. Crab harvest levels during 1982 and 1983 are expected to remain at current low levels.

BASIC INDUSTRY FORECAST

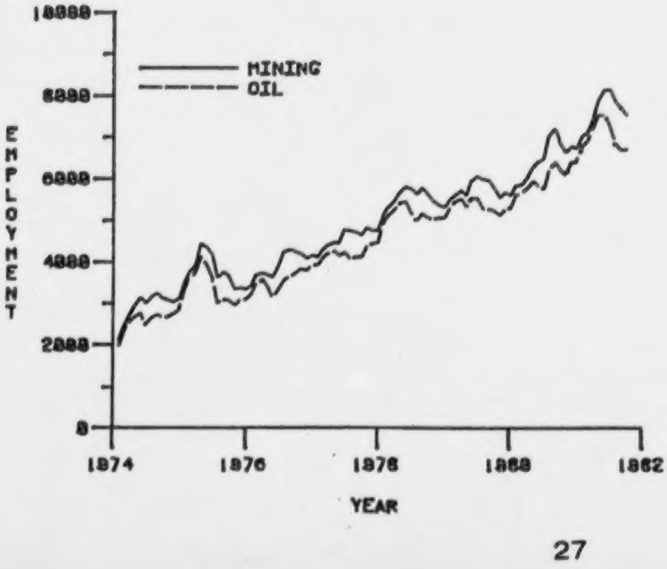
MINING

Mining employment will grow at an annual rate of 11.6 percent over the next two years. North Slope oil field development will be the primary source of growth with additional employment opportunities provided by increased coal activity and mineral exploration. Both SOHIO and ARCO, the major Prudhoe producers, anticipate spending over $11 billion for exploration and development over the next five years. This translates into employment increases for these companies and their contractors. Oil wells drilled on state lands are expected to exceed the 1980 total of 112 as companies develop their current fields and explore promising new fields offshore. Major Outer Continental Shelf (OCS) activity associated with recent lease sales is not expected to be a significant source of new employment growth during the near term.

Coal mining activity is expected to increase in response to increased in-state use and new export markets. Although Usibelli is currently the only active coal mine in the state, there are enormous coal reserves close to tidewater. The Beluga field west of Anchorage and the Bering River field near Cordova are two of the most likely areas for future development. Each field has several hundred million tons of reserves. The Bering River field has captured the interest of South Korean trading companies who wish to export the relatively high BTU coal. The Beluga field is larger with lower BTU coal, but less scattered than the Bering River field. Current coal production in Alaska is somewhat more than 700,000 tons per year. This will increase in the near term in response to South Korean purchases of Usibelli coal to be transported by railroad to Seward. Increased mining and transportation employment is expected as additional markets develop.

Noranda's Greens Creek mineral discovery near Juneau is expected to be in production by 1985. The silver-zinc-lead mine will employ approximately 300 people for the 12 to 30 year life of the project. The U.S. Borax molybdenum mine near Ketchikan is expected to directly employ over 800 workers during operation for the estimated 70 year life of the mine. Total employment increases in the area may exceed 1,500 jobs. Major construction activity is not expected until 1984, assuming environmental and financial hurdles are overcome. Bulk sampling road construction may begin during 1982, pending the outcome of current litigation.

Continued growth in oil, mineral, coal, and sand and gravel mining will provide over 1,700 new jobs over the next two years.



GRAPH IV-1
ALASKA EMPLOYMENT
MINING, OIL AND GAS EXTRACTION

TABLE IV-3
ALASKA
NONAGRICULTURAL EMPLOYMENT
BY INDUSTRY
ANNUAL AVERAGE PERCENT CHANGE

	1980 / to 1981	1981 to 1982	1982 to 1983
Total Employment	**5.0**	**4.4**	**3.8**
Mining	10.8	11.1	12.5
Construction	16.0	7.3	3.0
Manufacturing	-5.0	4.6	4.4
Trans./Comm./Utilities	2.9	2.3	2.8
Transportation	4.4	2.5	2.5
Communications	-2.3	0.0	4.7
Utilities	7.1	6.7	0.0
Trade	7.1	4.4	4.0
Wholesale	5.5	8.6	4.8
Retail	7.5	3.5	3.8
Finance, Ins., Real Estate	7.7	3.6	5.8
Services	5.7	5.1	3.7
Civilian Government	3.5	3.2	2.8
Federal	-1.1	0.6	0.6
State	5.9	5.6	5.3
Local	5.8	3.7	2.7
Miscellaneous	-12.5	0.0	0.0

1/ 1980:4 Estimated.

Source: Alaska Department of Labor, Research and Analysis (ES 202 Federal Report of Employment and Wages, BLS 790 Current Employment Statistics and LABMOD Projections).

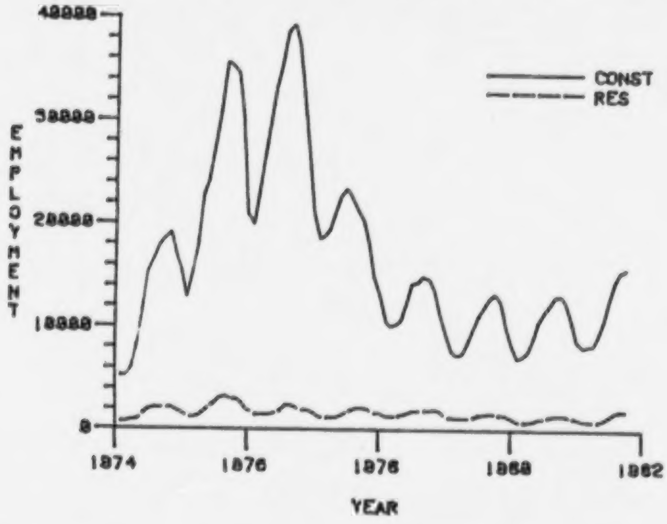
CONSTRUCTION

A large increase in construction employment is anticipated over the relatively low 1979 and 1980 levels. Employment figures for 1981 are not yet available. The 1981 construction boom did not materialize until the latter half of the year. As a result of the late start, construction employment may be lower than forecasted earlier in the year. Many large scale public and private projects have been delayed suggesting that much of the anticipated employment increase will be felt in 1982.

Large public expenditures are the main source of new construction activity. Massive capital budgets passed by the Legislature in 1981 and 1982 have provided funds for numerous roads, schools, airports, hydro projects and public buildings that will impact the state's economy for the next few years. Projects totaling $400 million were expected to be put under contract by the Department of Transportation and Public Facilities during the 1981 construction season. In addition to these, a few hundred million dollars worth of projects were backlogged. Construction delays for the Project 80's group of facilities for Anchorage have also contributed to less than anticipated employment levels. Assuming a national historical average of more than ten full time building construction jobs created per million dollars of expenditure, the impact of these state supported projects is apparent. Appropriations over $300 million for hydroelectric projects for fiscal years 1982 and 1983 will contribute to statewide employment increases.

Major privately financed construction in the state involves oil industry construction, and building of business structures and homes. In Anchorage several major office buildings are being planned or are under construction and will impact the local economy in 1982 and 1983. These include the ARCO building, Frontier building, Resolution Tower and the Hunt building. Although there has been some concern expressed about excess capacity of office space, that will not effect near term employment.

GRAPH IV-2
ALASKA EMPLOYMENT
TOTAL CONSTRUCTION, RESIDENTIAL CONSTRUCTION



Recent increases in Alaska Housing Finance Corporation subsidized interest rates have dampened the market for more expensive homes. With interest rates at 12⅛ percent (November 1, 1981) on the first $90,000, up over two percent from the first part of 1981, demand is expected to be slower. However, recent numbers of building permits issued show the total number of housing units authorized for the first nine months of 1981 up nearly three times over the corresponding period in 1980. In addition, rental vacancy rates for Anchorage in September 1981 declined to 6.3 percent, half of that recorded in 1980 during the same month. The net effect of increasing demand for housing and upward movement in mortgage rates will determine the level of residential construction employment in 1982 and 1983. If national interest rates decline as anticipated, and if the state continues to support lower home mortgage interest rates, residential construction employment should remain at current levels.

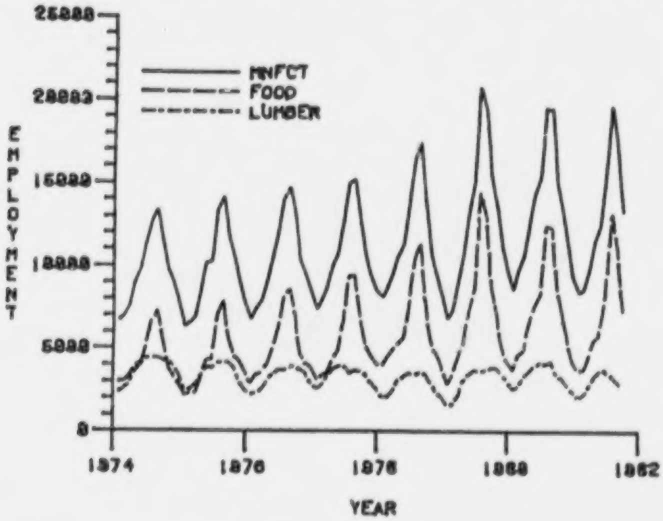
Construction employment increases suggested by indicator data are confirmed by recent union membership out-of-work reports. There have been increases in the numbers of union members employed. However, there still remains a large percentage of union membership out of work. Major construction projects will provide the only opportunity for many union members to work on a regular basis.

MANUFACTURING

Manufacturing employment currently comprises over 8 percent of total employment with an anticipated annual growth rate of over 4.5 percent. Most manufacturing employment is associated with raw natural resource processing of fish, timber and oil. Near term growth will likely come from increased timber harvests (and discovery of new markets) as well as greater utilization of the fisheries resource. Long term growth will likely come from coal, oil, slow bottomfish development, and in state processing of gas liquids.

The statewide salmon catch for 1982 is expected to be comparable to the 1981 catch with a preliminary total estimate from all regions of 130 million fish. Crab catches were disappointing in 1981 with harvest levels not expected to reach the 40 million pound quota. (1980 catch was 130 million pounds). Crab catches are not expected to improve over the next two years. Fish processing employment will likely remain fairly stable or have a downward bias due to reduced crab processing employment. Because fish catches are difficult to predict, employment estimates are speculative at best.

GRAPH IV-3
ALASKA EMPLOYMENT
MANUFACTURING, FOOD AND KINDRED, LUMBER AND PULP



Timber industry employment depends upon harvest levels and market conditions. The amount harvested and allocation to round log export, pulp or sawmill use will affect employment accordingly. Major sources of timber are from federal, native and state lands in Southeast Alaska. In 1981, 87 percent of timber harvested in Southeast Alaska came from federal lands. The U.S. Forest Service is congressionally mandated to offer an annual harvest of 450 million board feet for the rest of the decade. This harvest level is expected to be maintained during the forecast period. Harvested timber from Native Corporation lands was approximately 70 million board feet in 1981 but is expected to rise over 200 million board feet during the 1980's.

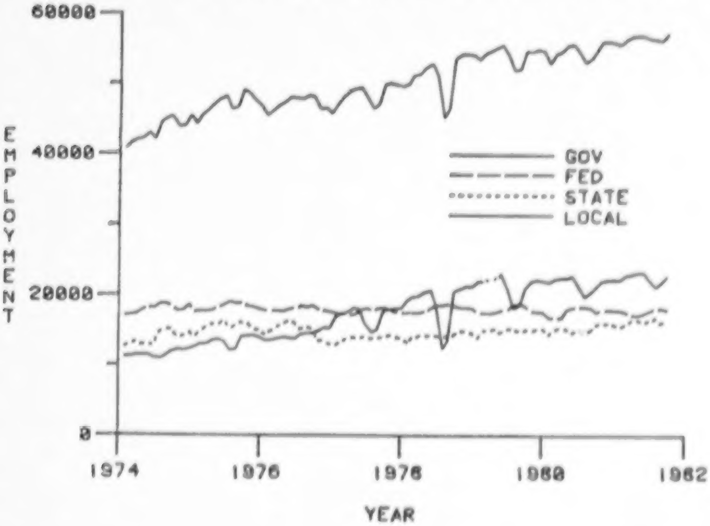
Poor international timber market conditions in 1981 resulted in early closure of Southeastern logging camps and temporary closure of the Louisiana-Pacific pulp facility in Ketchikan. 1982 is not expected to bring much improvement to the timber market but longer term expectations are more favorable as foreign markets improve. Assuming adequate levels of demand, increased harvesting from Native Corporation lands will result in employment growth predominantly in the logging sector. Because export timber is often more valuable in round log form and timber harvested from private lands is not subject to in state primary processing, employment growth in sawmills and pulp mills is not likely to grow as fast as logging employment.

GOVERNMENT

Employment in government makes up 32 percent of nonagricultural wage and salary employment. Government employment is expected to grow at an annual rate of three percent with state government growing the fastest. Total federal civilian employment will continue to exceed that of state government employment until 1983. Local government employment will be positively impacted by state revenue sharing programs and a broader tax base. Losses of federal funds for public service employment have generally been offset by these programs.

State government employment growth will be influenced by several factors. The amount of petroleum revenue receipts, amount saved in the Permanent Fund, and the type of spending limitation put into place will all affect the number of people employed directly and indirectly by the state. The state budget passed in 1981 created over 1,000 new positions suggesting strong growth in this area. Some new positions may *remain vacant* or *replace others* so the net effect is still uncertain. Despite recent U.S. Department of

GRAPH IV-4
ALASKA EMPLOYMENT
TOTAL GOVERNMENT, FEDERAL, STATE, LOCAL



Energy forecasts, the Petroleum Revenue Division of the Department of Natural Resources anticipates continued near term increases in petroleum revenues, which currently comprise nearly 90 percent of all general fund unrestricted revenues. With petroleum revenues equal to one half of total Alaska personal income in 1980, the impact of this revenue source on the economy will be considerable. Although limitations may be placed on expenditures, most proposals call for real expenditure increases based upon population increases. This will leave room for healthy growth rates in state government employment.

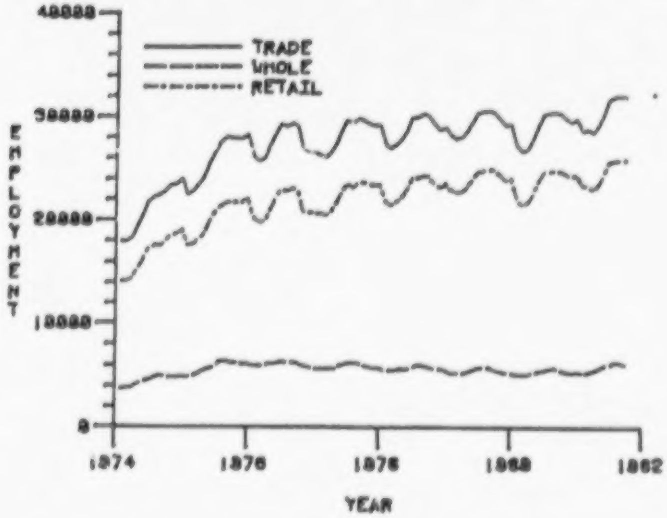
Federal government employment is currently slightly less than 18,000. Stable employment levels are anticipated over the next few years despite federal cutbacks. The actual impact on Alaska of those cutbacks has not yet been determined. Historically, federal government has been the most important employer in the state, providing a major source of economic stability in a seasonal economy. The importance of this sector has been declining in recent years and is expected to continue to decline in importance relative to total employment. Civilian and military federal government expenditures will have the greatest impact on Alaska's two largest cities. Most federal government personnel in Alaska are located in Anchorage and Fairbanks.

NONBASIC SECTOR

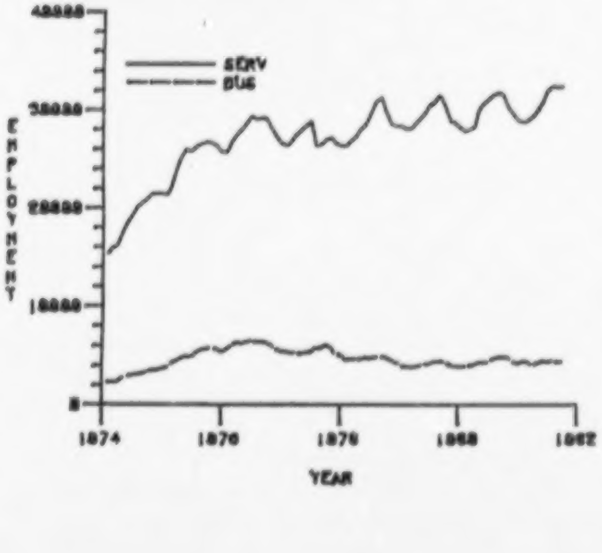
Transportation, communications and public utilities; trade; finance, insurance and real estate; and services are all directly affected by the health of Alaska's basic (export) industries. These non basic industries make up nearly 50 percent of total wage and salary employment. Most new jobs created over the next two years will be in these industries. The nonbasic sector, mirroring a national trend, will continue to grow faster than total employment. Increased incomes provide the opportunity for expenditures in this sector.

Although most of the employment in these industries is nonbasic, a small percentage is dependent upon exogenous demand and can be classified as basic employment. For example, tourism impacts transportation and service (lodging) employment by providing a large number of jobs financed by nonresident expenditures. In addition, some service employment is associated with Native Corporations and federally funded programs.

GRAPH IV-6
ALASKA EMPLOYMENT
TOTAL TRADE, WHOLESALE TRADE, RETAIL TRADE



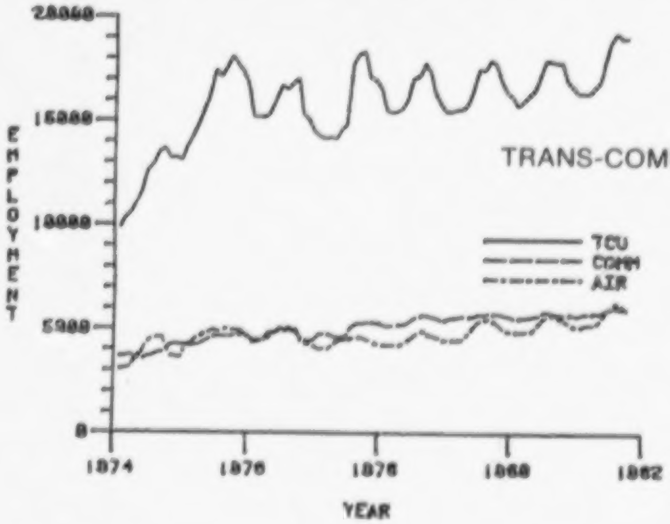
GRAPH IV-5
ALASKA EMPLOYMENT
TOTAL SERVICES, BUSINESS SERVICES



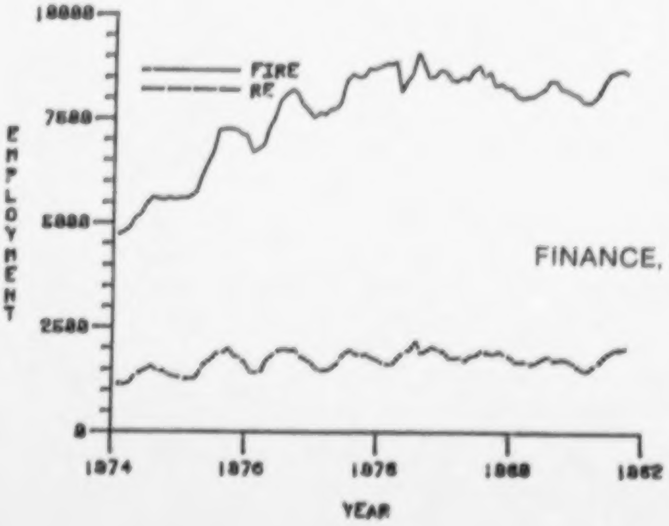
The services industry will add the most nonbasic jobs to the Alaska economy during the forecast period. Total service employment is likely to increase by 2,800 jobs. Jobs in the service sector include those associated with hotels, business and consulting services, health and social services, and unions and other membership associations. A general increase in Alaska economic activity and an increase in visitor expenditures will have the greatest impact on this sector. In addition, an expanding market will afford the opportunity for the provision of new business services formerly obtained outside of Alaska. Services employment will grow at a faster rate than total employment in Alaska.

Trade employment, which accounts for 18 percent of total employment in Alaska, will provide 2,700 new jobs over the next two years. Wholesale trade employment is concentrated in hardware, plumbing, heating, wholesale groceries and heavy equipment and machinery. Increased construction activity will provide major stimulus to wholesale trade employment. Wholesale firms will also increase in number as new thresholds are reached making new in state distribution centers for goods profitable.

Retail trade employment is primarily associated with eating and drinking establishments, food stores, general merchandise and automobile sales. The general level of economic activity, amount of income and amount of discretionary income directly influences employment in this sector. Due to increased



GRAPH IV-7
ALASKA EMPLOYMENT
TRANS-COMM-UTILS, COMMUNICATIONS, AIR TRANS



GRAPH IV-8
ALASKA EMPLOYMENT
FINANCE, INSUR. AND REAL ESTATE, REAL ESTATE

expenditures by government and the oil industry, retail trade employment should grow by about 4 percent over the next two years. This growth will provide nearly 2,000 new jobs, many of which do not require a high degree of technical skill.

Most transportation employment growth will occur in the air, water and trucking transportation sectors. Export of Alaska's raw and processed natural resources as well as importation and distribution of goods should increase in volume creating the need for more workers. Both interstate and intrastate transportation systems will be affected. Increasing numbers of visitors will also impact transportation employment, although the high cost of discretionary travel may have a negative influence.

SUMMARY

Alaska's total employment will grow at a rate of four percent over the next few years. After the modest growth of 1979 and 1980, 1981 showed great improvement and 1982 and 1983 should be even better. The total effect of large increases in state expenditures will be felt during this period. Real increases in Alaska's petroleum revenues will be required to sustain this level of activity for the remainder of the decade. If oil income peaks in the next few years, as the state believes, growth will have to come from other minerals, coal, improved fisheries, and more instate processing of raw natural resources.

Alaska's seasonal economy is still very dependent on a few sources of revenue. Oil has been added to the list of federal government, fisheries and timber. Our economy is small with dispersed labor markets. The longer term outlook suggests more diversification of the economy, and more stability with new employment opportunities for Alaskans.

MAJOR PROJECT UPDATE

In recent years many projects have been proposed which would have large scale impacts on the Alaska labor force. Several of these projects have been in limbo for years awaiting more favorable economic conditions or resolution of financial and environmental problems. Proposed projects include the Alpetco petrochemical facility, Pacific Alaska Liquid Natural Gas (LNG), the gas pipeline, and coal to methanol conversion. Three projects are of most current interest to planners in terms of information availability, likelihood of initiation and size of impact. They are the Northwest Alaskan Gas Pipeline, the Dow-Shell petrochemical facility and the U.S. Borax molybdenum mine near Ketchikan.

NORTHWEST ALASKAN GAS PIPELINE

The 745 mile Alaska portion of the gasline proposed by Northwest Alaskan Pipeline Company would be part of the largest privately financed construction project in the world. The total pipeline, including the Canadian segment, continental United States east and west legs and the gas conditioning facility, has been estimated to cost $23 billion (in 1980 dollars). The project would employ over 13,000 workers in Alaska at the peak of construction, a level about one half of that employed at the peak of oil pipeline construction. Approximately 25,000 man years would be required to complete the pipeline.

Although there is a great deal of uncertainty surrounding the time frame and financing of tne project, the gas pipeline would have the largest impact on the state of any of major proposed projects and cannot be overlooked for planning purposes. During construction large numbers of skilled trades will be required providing opportunities to many who have been out of work or who want to learn a new skill. A large number of relatively unskilled job opportunities will be available on the project as well. Indirect and multiplier effects will increase the number of jobs beyond that directly associated with the gasline. This may amount to an additional five or six thousand jobs at the peak of construction.

Because the large number of new jobs would far exceed applicants with the requisite skills, there would likely be a large number of in-migrants. Alaska's economy has expanded since oil pipeline construction

TABLE IV-4
ALASKA GASLINE EMPLOYMENT

	1983	1984	1985	1986	1987
DESIGN/ADMINISTRATION					
Construction Managers	95	245	245	175	35
Administrative Managers	40	80	80	60	10
Procurement Managers	25	50	50	40	5
Accountants	65	75	75	70	20
Computer Personnel	50	74	74	70	10
Engineers	200	383	383	225	30
Lawyers	9	12	14	14	10
Life/Physical Sciences	18	18	19	10	3
Personnel/Labor Relations	26	36	47	45	1
Public Relation. Writers. Photo	7	10	14	8	1
Surveyors	80	—	—	—	—
Engineering Technicians/	—	600	800	800	50
Bookkeepers	25	75	75	60	20
Secretaries	35	75	75	60	20
Clerks	40	120	120	90	41
Machine Operators	25	75	75	60	28
Misc. Clerical	20	70	70	60	28
CRAFT					
Asbestos	23	6	46	39	10
Carpenter	99	39	68	45	40
Caterer	210	850	1,075	850	30
Food Service	162	755	959	734	16
Firefighter	12	24	24	24	7
Security	36	71	92	92	7
Electrician	86	82	201	347	62
Iron Worker	190	110	106	57	15
Laborer	218	1,002	2,126	1,215	69
Operating Engineer	367	1,987	2,997	1,815	122
Pipefitter/Plumber	227	84	221	244	76
Teamster	217	1,322	2,026	480	54
Fitter/Welder	97	125	1,005	617	2
TOTAL	**2,494**	**7,605**	**12,087**	**7,556**	**779**

1/ Technical disciplines included in this category: Electrical, Structural, Mechanical, Piping, Vessels, Control Systems, Cost Analysis, Procurement, Documentation Coordinator, Technical Writer.

Source: Northwest Alaskan Pipeline Company Affirmative Action Plan and 7/81 update.

NOTE: All employment may not be in Alaska. Actual year of activity is dependent upon financing.

years and this project will be much smaller than the oil pipeline not only in actual size but also relative to the total economy. There would still be large increases in the demand for housing, government facilities and social services, with similar positive and negative effects that were associated with the oil pipeline construction era. See Table IV-4 for estimated employment by major occupation.

DOW-SHELL PETROCHEMICAL FACILITY

The Dow-Shell Group presented a report to the State of Alaska discussing the feasibility of a petrochemical industry based upon the gas liquid feedstock available on the North Slope. The report discussed economic, environmental, employment and population impacts associated with the project. With peak construction employment likely to exceed 12,000*, construction of the gas liquids pipeline and petrochemical facility would have peak worker requirements comparable to that of the gas pipeline. Table IV-5 illustrates Dow-Shell's estimated occupational employment by each year of the project. Long term employment will be one of the greatest benefits associated with the petrochemical construction industry. Pipelines generally require a relatively small number of permanent workers while petrochemicals would allow for more in state processing of petroleum products. Over 1,600 permanent positions are planned for Phase 1 (see Table IV-6) of the project. These jobs combined with an estimated 50 percent additional workers directly

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* Figures contained in the Dow-Shell report were average daily demand and did not include seasonal peaks or project management employment.

TABLE IV-5
CONSTRUCTION EMPLOYMENT FOR THE DOW-SHELL PETROCHEMICAL FACILITY

	YEAR OF PROJECT:			
PETROCHEMICAL PLANT CONSTRUCTION	1st	2nd	3rd	4th
Civil Crafts	392	1,568	2,205	735
Bricklayers				
Carpenters				
Cement Masons				
Operating Engineers				
Laborers				
Painters				
Truck Drivers				
Metal Trades	58	408	466	233
Boilermakers				
Iron Workers				
Millwrights				
Sheetmetal				
Misc. Workers				
Piping Related	74	373	2,016	1,269
Pipe Fitters				
Welders				
Insulators				
Electrical	28	186	980	672
Electrical				
Instrumentation				
SUBTOTAL PETROCHEMICAL PLANT CONSTRUCTION EMPLOYMENT	552	2,535	5,667	2,909
Pipeline and Terminal Construction				
Direct Labor	127	704	1,960	280
Foremen & Superintendents				
Operators				
Welders				
Mechanics				
Drillers				
Powdermen	Direct			
Spotters	Labor			
Exploders				
X-Ray Technicians				
Bending Technicians				
Warehousemen				
Inspectors				
R.O.W. Engineers				
Engineers & Managers				
Truck Drivers				
Laborers				
Support Labor	139	762	2,123	303
Oilers				
Welder Helpers				
Driller Helpers				
Survey Helpers				
Grease/Fueler				
Grease/Fueler Helpers				
Office Workers				
Swampers				
SUBTOTAL PIPELINE AND TERMINAL CONSTRUCTION EMPLOYMENT	266	1,466	4,083	583
TOTAL AVERAGE DAILY DEMAND	**818**	**4,001**	**9,750**	**3,492**

Source: Alaska Petrochemical Industry, Feasilibity Study, Dow-Shell Group, September, 1981.

TABLE IV-6
PETROCHEMICAL FACILITY, PIPELINE AND TERMINAL OPERATIONS EMPLOYMENT

OPERATIONS AND MAINTENANCE PERSONNEL

Job Category	Phase 1	Phase 2	Total
1. Officials and Managers	247	100	347
2. Professional	167	43	210
3. Special Technicians	51	26	77
4. Office and Clerical	140	29	169
5. Maintenance Technicians and Craftsmen	341	113	454
6. Operations Technicians and Operatives	474	189	663
7. Laborers	100	28	128
8. Service Workers	91	11	102
TOTALS	**1,611**	**539**	**2,150**

Source: Alaska Petrochemical Industry Feasibility Study, Dow-Shell Group, September, 1981

TABLE IV-7
Major Occupational Titles for a Similar Petrochemical Facility (with 1,610 employees located on the U.S. Gulf Coast)

	Number
Chemical operator	264
Supervisors	145
Chemical engineer	126
Mechanical engineer	124
Plumber, pipefitter	102
Chemical helper	100
Chief chemical operator	96
Mechanical, engineering technicians	88
Chemist	80
Machinist	67
Electrical, electronic technicians	62
Electrician	42
Accountants, Auditors	26
Welder	19

Source: Occupational Employment Survey Program.

employed by contractors for separate services, may result in nearly 2,500 direct jobs. Indirect and income induced employment would add an additional 1,500 to 2,500 jobs to the state economy. This represents a sizeable number of relatively high paying jobs, many of which do not require post secondary degrees for job entry. Table IV-7 illustrates the occupational composition of an existing petrochemical facility similar to that which Dow-Shell envisions.

Feasibility of the project is questionable, however. The Dow-Shell Group found that oil prices (in 1981 dollars) would have to rise above $40 per barrel, gas liquids would have to be made available to them by the oil companies and a gas pipeline decision would have to be made before the project could go foreward. With energy experts now forecasting no major increases in the real price of oil over the next several years this project does not appear likely to be undertaken during this decade.

U.S. BORAX MOLYBDENUM MINE

The U.S. Borax Quartz Hill molybdenum mine near Ketchikan is one of the few major projects being studied that appears to have a good chance of success. Size and accessibility of the mineral deposit along with total company investment to date suggests that the largest potential mine in Alaska may soon be providing a large number of new jobs. Impacts of a project of this size will surely be felt throughout Southeastern Alaska and, to a certain extent, throughout the state. If the project begins operation in 1987 as planned, new opportunities will be provided for Alaska's unemployed. Training programs will be needed to assure that Alaskans are able to benefit from construction and operation of this facility.

The project, representing an $870 million investment (in 1980 dollars), will process 60,000 tons of molybdenite ore per day. Total in place reserves are in excess of 1.5 billion tons, giving the mine an estimated 70 year life. After processing the pulverized waste will be stored behind reservoirs or dumped in a fjord. Some access road construction is expected during 1982, but major construction is not expected to begin until 1984 under the current plan. The construction phase will require over 1,000 workers who will prepare the mine site for operation in 1987. During operation over 500 direct jobs are planned at the mine site. Most jobs will be heavy equipment operators, mechanics and operators of processing equipment. (See Table IV-8). However, a wide variety of occupational titles is included in U.S. Borax's plan. Many of the occupations are currently in short supply.

Current labor force employment estimates prepared by Research and Analysis show that total employment in the Ketchikan census division is approximately 6,000 with about 600 unemployed. Clearly there is not a sufficient number of unemployed workers available to fill the direct jobs. Indirect and income induced employment would likely add an additional 400 to 600 jobs to the local economy above and beyond actual mine employment. A large number of job opportunities will also be available to Alaskans outside the local area. In addition, the project may provide employment for some workers who have been unable to participate in the state's labor market.

Although the full range of community, environmental and fisheries impacts have yet to be analyzed, the economic impact will be considerable. The project represents a broadening of Southeast Alaska's economic base by providing a large number of new jobs in an area that has recently had unemployment rates exceeding ten percent. With timber and fishing subject to extreme market and biological cycles this project provides diversity and a stabilizing influence. Table IV-8 illustrates an occupational profile by U.S. Borax for operational employment.

TABLE IV-8
SELECTED OCCUPATIONAL DEMAND
U.S. BORAX MOLYBDENUM MINE

Officers and Managers	38
Professionals	52
Engineers	17
Chemists	6
Technicians	34
Laboratory Technicians	8
Instrument Technicians	7
Environmental Technicians	4
Service	28
Watchmen	17
Crafts	509
Filter, Crusher, Thickener Operators and Helpers	107
Mechanics and Helpers	76
Heavy Truck Drivers	55
Laborers	41
Light Truck Drivers	28
Electricians and Helpers	27
Dozer Operators	20
Welders	18
Power Plant Operators	15
Drillers	13
Machinists	12
Shovel Operators	11
Pipefitters/Helpers	10
Oilers	7
Clerical	69
Clerks	23
Secretaries	16
Total//	**730**

Source: U.S. Borax

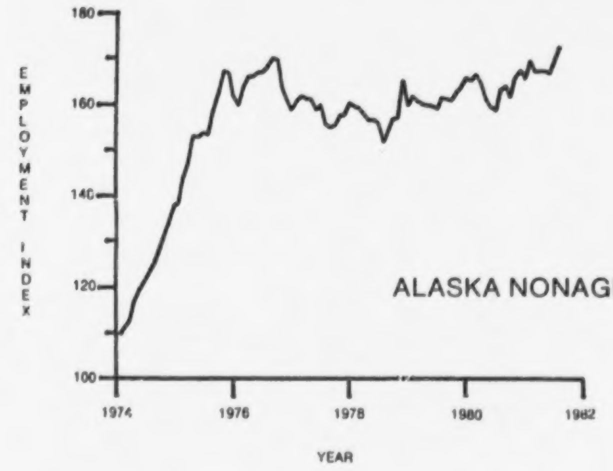
// Total employment figures have been revised upward since the detailed manning plan was prepared. Total direct employment is now estimated to exceed 800.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT INDEX

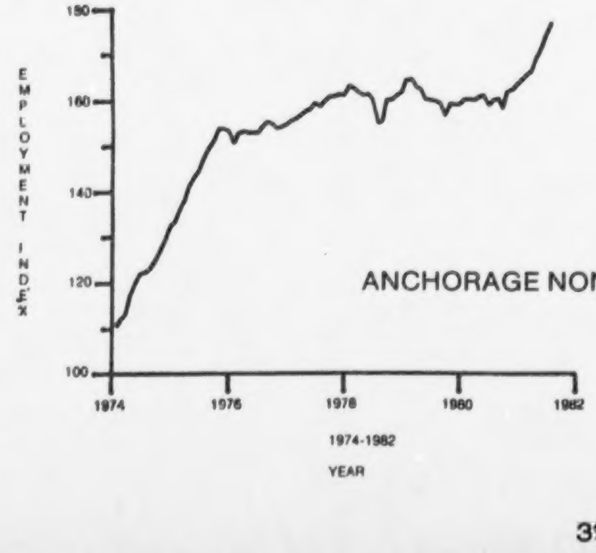
Wage and salary employment indices are computed for Alaska, Anchorage and Fairbanks. These indices are useful in determining whether employment gains or losses in a particular area reflect real changes due to underlying economic conditions, or whether changes are simply normal season variation. For example, increased summer employment does not necessarily indicate underlying economic expansion. Expansion would be indicated only if the increase is greater than normal. The employment index can show a downturn despite increased employment if the summer increase in employment is less than usually occurs.

Use of the index also allows readers to compare interarea growth despite varying seasonal patterns and different sizes of economies. A one to two month change should not be construed as a new trend. Significance of changes in the employment index become more important if continued over several months.

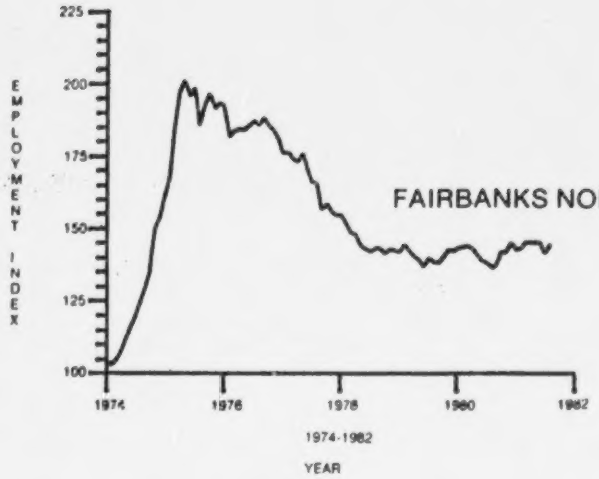
Each month employment for each of these areas is adjusted by a seasonal factor computed by the U.S. Bureau of Census X-11 seasonal adjustment method. The resulting adjusted employment is divided by the average employment in a pre-pipeline base year. The current base year is 1972.



GRAPH IV-9
ALASKA NONAGRICULTURAL EMPLOYMENT INDEX



GRAPH IV-10
ANCHORAGE NONAGRICULTURAL EMPLOYMENT INDEX



GRAPH IV -11
FAIRBANKS NONAGRICULTURAL EMPLOYMENT INDEX

TABLE IV-9
NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT INDEX
(Base Year is 1972)

	ALASKA	ANCHORAGE	FAIRBANKS		ALASKA	AANCHORAGE	FAIRBANKS
1974 January	109.8	110.7	103.2	1977 January	161.0	155.9	176.1
February	111.1	112.1	104.7	February	162.0	156.1	174.0
March	112.7	113.4	107.4	March	161.3	156.9	172.8
April	117.0	117.6	111.7	April	161.0	157.9	176.1
May	119.8	120.5	116.6	May	158.8	158.3	170.5
June	121.5	122.5	119.8	June	160.2	159.6	165.7
July	123.4	122.8	125.0	July	155.5	158.8	165.3
August	125.5	123.7	130.5	August	154.8	160.0	156.5
September	128.6	125.3	135.6	September	155.6	161.1	158.5
October	131.9	127.4	151.2	October	157.9	161.1	155.6
November	134.4	129.8	154.3	November	158.0	161.5	154.4
December	138.5	133.0	162.6	December	160.7	161.3	154.6
1975 January	139.0	133.9	168.8	1978 January	159.5	163.5	150.9
February	144.1	136.6	185.2	February	159.1	162.8	148.4
March	147.5	138.6	198.0	March	157.8	161.8	147.5
April	153.5	141.7	201.6	April	156.6	161.0	143.9
May	153.3	143.6	195.6	May	156.7	161.0	142.6
June	154.1	145.3	198.6	June	155.7	160.0	141.8
July	153.5	147.9	185.5	July	151.6	155.0	143.4
August	159.2	150.0	192.7	August	154.5	155.6	143.2
September	162.9	151.7	196.9	September	157.0	160.3	141.3
October	167.7	154.2	191.2	October	157.6	160.6	143.0
November	167.1	154.1	193.6	November	165.7	161.4	142.5
December	161.8	153.8	192.5	December	159.6	162.2	141.8
1976 January	159.6	150.6	181.4	1979 January	162.0	164.8	144.6
February	163.8	153.3	184.1	February	160.7	165.1	142.2
March	166.3	153.5	184.6	March	160.0	162.7	140.2
April	166.3	153.0	184.3	April	159.6	162.2	139.0
May	167.1	153.1	185.5	May	159.6	160.2	136.9
June	167.3	153.0	187.2	June	159.0	159.8	139.9
July	168.6	154.4	185.5	July	161.7	159.6	138.2
August	170.3	155.4	188.2	August	161.5	159.1	138.1
September	169.5	154.9	185.4	September	161.0	156.6	140.1
October	163.5	153.9	183.6	October	163.2	159.5	142.9
November	160.8	154.5	180.8	November	164.4	159.2	142.3
December	158.8	154.8	175.9	December	166.0	159.1	143.6

TABLE IV-9
NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT INDEX
(Base Year Is 1972)

	ALASKA	ANCHORAGE	FAIRBANKS
1980 January	165.2	160.4	143.2
February	166.7	160.4	144.7
March	164.2	160.1	142.6
April	161.1	160.8	140.6
May	159.4	161.0	138.7
June	158.6	158.7	137.9
July	163.4	160.2	136.1
August	164.4	160.3	137.9
September	161.5	158.1	142.3
October	165.9	161.9	142.1
November	167.7	162.4	145.3
December	165.4	163.7	142.4
1981 January	169.5	164.7	143.1
February	168.1	165.7	145.3
March	167.2	166.6	145.0
April	167.1	169.6	145.0
May	166.6	171.5	144.9
June	169.4	174.2	141.4
July	172.7	177.1	144.6
August	169.0	177.6	142.4
September	169.0	178.6	143.1

CHAPTER V OCCUPATIONAL EMPLOYMENT STATISTICS

OCCUPATIONAL EMPLOYMENT FORECAST

These occupational employment estimates and projections are produced to provide partial answers to the questions of how many nonagricultural wage and salary jobs are currently in Alaska, how many are projected for 1982 and 1986, and the number of average annual job openings from 1981 through 1986 as a result of industry growth plus job separations due to death, retirement, and temporary withdrawal from the labor force. Employment increases from 1981 to 1982 and 1986, shown in the tables are the result of industry growth. Average annual job openings between 1981 and 1986 are the sum of new jobs created by industry growth and replacement openings resulting from death and retirement.

Average annual job openings between 1981 and 1986 exclude openings resulting when workers change jobs leaving an opening to be filled by someone else. Including these openings would result in a larger number of openings than given here. No attempt has been made to measure this quantity to date as there is no practical way to do so with reasonable accuracy. Job openings considered here are more closely related to job training programs for people who will be entering the occupational ranks.

These data were produced from the Research and Analysis Section's Industry-Occupation (I-O) Matrix. This matrix is based on Occupational Employment Statistics (OES) industry surveys which cover all nonagricultural wage and salary elements of Alaska's industries. Seven surveys are conducted on a three year cycle; they cover the following major industry groups: manufacturing, nonmanufacturing, trade, regulated industries, government, education, and hospitals. Separate publications are available upon request.

Occupational profiles of Alaska's nonagricultural industries are determined from the surveys. Industry occupational ratios determined for the survey reference year are then applied to LABMOD* industry employment projections for specific years considered. Occupations are then summed across all the industries. Industry employment projections used exclude the gas pipeline project, the possibility of a capital move, or any other major new economic activity. See Major Project Update (beginning on page for an occupational analysis of Northwest Alaskan Gas Pipeline, Dow Shell Petrochemical Facility and U.S. Borax Quartz Hill Molybdenum Mine. If it becomes apparent such major new activity will occur within the projection period, users of these data will need to make suitable allowances.

Occupations are divided into seven major groups: managers and officers, professional, technical, service, craftworkers/operators/laborers, clerical, and sales. Craftworkers/operators/laborers are divided in three major groups: skilled, semiskilled, and unskilled.** Skilled craft worker jobs require specific vocational training of more than two years, semiskilled worker jobs require specific vocational training of more than 30 days and up to two years, and laborer jobs require training consisting of anything from a short demonstration up to training or preparation of 30 days. Employment and job opening projections are presented in unrounded numbers, thus implying a degree of accuracy much greater than the reliability of the information sources and methods used in their preparation. Accordingly, these data should be considered as indications of probable trends with employment often varying above or below the projected amounts.

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* *LABMOD is the Research and Analysis Section's econometric model which has provided basic employment projections for 17 major industry groups.*

** *Skill level is identifiable from the code number preceding the occupational title. The third digit in the codes which begin with 55 designates the skill level: 1 designates skilled, 2 designates semiskilled, 3 represents unskilled. For example, 551A47 indicates a skilled occupational level. This modification of OES codes facilitates computer programming.*

TABLE V-1

ESTIMATED EMPLOYMENT BY OCCUPATION AND GROWTH AND REPLACEMENT NEEDS ALASKA

STATEWIDE

CODE	OES OCCUPATION TITLE	1981 EMPLOYMENT	1982 EMPLOYMENT	1986 EMPLOYMENT	AVE. ANNUAL JOB OPENINGS 1981 1986		
					TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
1 *****	OFFICERS AND MANAGERS						
100013	INSPECTORS(EX CONST) PUB ADMIN	283	288	305	9	4	5
100093	CONSTRUCTION INSPECTORS--PUB ADM	110	113	122	4	2	2
100113	DIRECTORS--FOOD AND BEVERAGE	58	61	76	6	4	2
100193	MANAGERS--PROPERTY & BUILDINGS	10	11	12	0	0	0
100213	MANAGERS--SALES	11	11	14	1	1	0
100323	MANAGERS--MERCHANDISE	385	407	512	36	25	11
100353	MANAGERS--STORE	1,668	1,759	2,183	151	103	48
100463	MANAGERS--AUTO SERVICE DEPT	49	52	65	4	3	1
100473	MANAGERS--AUTO PARTS DEPT	68	72	89	6	4	2
100483	WHOLESALERS	501	533	684	52	37	15
100493	MANAGERS--RESTAURANT OR BAR	527	556	690	48	33	15
100503	POSTMASTERS & MAIL SUPERINTENDTS	141	142	145	7	1	6
100553	CAPTAINS--WATER VESSEL	83	85	101	6	4	2
100563	PILOTS--SHIP	27	27	32	2	1	1
100573	CHIEF EXECUTIVES OR LEGISLATORS	418	431	479	24	12	12
19000	ALL OTHER MANAGERS	12,739	13,318	16,020	1,017	656	361
	OFFICERS AND MANAGERS SUBTOTAL	17,078	17,866	21,529	1,373	890	483
2 =====	PROFESSIONALS						
210033	CHEMICAL ENGINEERS	36	38	50	3	3	0
210043	CIVIL ENGINEERS	885	912	1,023	43	28	15
210053	ELECTRICAL ENGINEERS	364	376	450	21	17	4
210063	INDUSTRIAL ENGINEERS	226	241	297	23	14	9
210073	MARINE ENGINEERS	12	12	13	0	0	0
210083	MECHANICAL ENGINEERS	382	393	472	25	18	7
210103	MINING ENGINEERS	18	19	21	1	1	0
210113	PETROLEUM ENGINEERS	389	433	653	57	53	4
210123	SAFETY ENGINEERS	50	54	71	6	4	2
210133	TRAFFIC ENGINEERS	11	11	13	0	0	0
21900	ALL OTHER ENGINEERS	168	173	200	10	6	4
221023	FINANCIAL ANALYSTS	13	13	17	4	1	3
221043	STATISTICIANS	112	115	128	8	3	5
222013	CHEMISTS	45	47	54	3	2	1
222023	GEOLOGISTS	455	485	624	38	34	4
222033	ATMOSPHERIC SCIENTISTS	61	62	65	2	1	1
22299	ALL OTHER PHYSICAL SCIENTISTS	44	44	51	1	1	0
223013	AGRICULTURAL SCIENTISTS	45	46	48	3	1	2
223023	BIOLOGICAL SCIENTISTS	537	545	578	17	8	9
223083	FORESTERS	169	170	175	3	1	2
22399	ALL OTHER LIFE SCIENTISTS	38	40	47	2	2	0
230023	ECONOMISTS	51	52	57	1	1	0
230033	MARKET RESEARCH ANALYSTS	13	14	18	4	1	3
230043	PSYCHOLOGISTS	116	124	152	9	7	2
230063	URBAN & REGIONAL PLANNERS	162	166	185	13	5	8
23900	ALL OTHER SOCIAL SCIENTISTS	113	117	133	25	4	21
240003	COMPUTER SYSTEMS ANALYSTS	270	278	314	11	9	2
240013	SYSTEMS ANALYSTS--BUSINESS	36	39	49	3	3	0
251013	TEACHERS--PRESCHOOL/KINDERGARTEN	436	459	550	34	23	11
251023	TEACHERS--ELEMENTARY SCHOOL	3,107	3,222	3,746	217	128	89
251033	TEACHERS--SECONDARY SCHOOL	2,598	2,695	3,133	166	107	59
251043	TEACHERS--COLLEGE	1,608	1,668	1,939	114	66	48
251053	TEACHERS--VOCATIONAL	166	172	201	15	7	8
251063	TEACHERS--NONVOCATIONAL	536	552	619	28	17	11
251073	VOCATIONAL & EDUC COUNSELORS	438	455	530	32	18	14
251083	GRADUATE ASSISTANTS	17	18	21	2	1	1
251133	INSTRUCTORS--CORRESPON. SCHOOL	16	16	18	0	0	0
25199	ALL OTHER TEACHERS	81	86	108	9	5	4
252053	TELEVISION CAMERA OPERATORS	44	44	52	2	2	0
25299	ALL OTHER PHOTOGRAPHERS	90	95	117	9	5	4
253003	PURCHASING AGENTS &/OR BUYERS	413	430	513	30	20	10
253013	BUYERS--RETAIL &/OR WHOLSL TRADE	202	213	267	25	13	12
254013	ACCOUNTANTS & AUDITORS	1,806	1,903	2,334	169	106	63
254023	ACTORS	22	24	30	2	2	0
254033	LANDSCAPE ARCHITECTS	27	28	31	1	1	0
254053	ARCHITECTS (EX: LANDSCAPE)	116	123	146	7	6	1

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					TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
254093	ANNOUNCERS--RADIO/TELEVISION	132	132	155	6	5	1
254123	BROADCAST NEWS ANALYSTS	30	30	35	1	1	0
254133	BUDGET ANALYSTS	49	51	61	3	2	1
254183	CASEWORKERS	439	459	532	29	19	10
254193	CHIROPRACTORS	22	24	30	5	2	3
254203	CHOIRMASTERS	12	13	16	1	1	0
254233	CLERGY	75	80	96	7	4	3
254263	COMMERCIAL ARTISTS	68	72	88	5	4	1
254273	COST ESTIMATORS--ENGINEERING	219	223	258	15	8	7
254293	CREDIT ANALYSTS	46	49	63	5	3	2
254313	DANCERS	13	14	17	2	1	1
254333	DENTISTS	111	118	141	7	6	1
254343	DIETITIANS/NUTRITIONISTS	58	62	76	7	4	3
254363	WRITERS &/OR EDITORS	154	163	197	13	9	4
254373	EMBALMERS	12	13	16	1	1	0
254423	INVESTIGATORS--INSURANCE	27	28	36	3	2	1
254433	EMPLOYMENT INTERVIEWERS	174	178	197	8	5	3
254453	LAW CLERKS	158	166	195	10	7	3
254463	LAWYERS	685	718	846	44	32	12
254473	LEASE BUYERS	23	26	39	4	3	1
254483	LIBRARIANS--PROFESSIONAL	200	207	238	16	8	8
254543	MUSEUM CURATORS	12	13	16	2	1	1
254563	MUSICIANS--INSTRUMENTAL	105	111	137	7	6	1
254573	NURSES--PROFESSIONAL	1,962	2,075	2,492	176	106	70
254583	OCCUPATIONAL THERAPISTS	15	17	21	1	1	0
254593	OPTOMETRISTS	17	18	22	2	1	1
254623	PARALEGAL PERSONNEL	116	122	146	8	6	2
254653	PERSONNEL & LABOR REL SPECIALIST	476	494	582	30	21	9
254663	PHARMACISTS	149	157	190	20	8	12
254683	PHYSICAL THERAPISTS	58	62	77	6	4	2
254693	PHYSICIANS &/OR SURGEONS	352	371	442	19	18	1
254723	PUBLIC RELATIONS SPECIALISTS	114	119	141	12	5	7
254753	DIRECTORS--RELIG ACT &/OR REL ED	14	15	19	1	1	0
254763	REPORTERS & CORRESPONDENTS	137	150	197	15	12	3
254773	RIGHT-OF-WAY AGENTS	24	25	29	1	1	0
254853	TITLE EXAMINERS &/OR ABSTRACTORS	50	53	69	6	4	2
254893	DESIGNERS	109	116	145	9	7	2
255013	COMMUNITY ORGANIZATION WORKERS	168	179	220	14	10	4
255033	WELFARE INVESTIGATORS	92	94	102	4	2	2
255043	JUDGES	48	49	53	2	1	1
255053	MAGISTRATES	61	63	68	3	1	2
255073	TAX EXAMINERS/COLLECTORS/REV AGT	154	156	165	7	2	5
255173	ASSESSORS	82	84	95	7	3	4
255223	ALL OTHER THERAPISTS	16	17	20	1	1	0
255273	APPRAISERS--REAL ESTATE	116	123	154	11	8	3
255283	FURRIERS	14	15	19	1	1	0
255313	TRAVEL AGENTS/ACCOM APPRAISERS	199	203	246	15	9	6
255333	CLAIM EXAMINERS--PROPERTY/CASLTY	15	16	21	1	1	0
255343	TAX PREPARERS	29	31	38	3	2	1
255353	GROUP RECREATION WORKERS	267	279	325	17	12	5
255383	SPEECH PATHOLOGISTS/AUDIOLOGISTS	102	106	125	8	5	3
255413	CORRECTIVE THERAPISTS	29	31	38	3	2	1
255423	RESPIRATORY THERAPISTS	32	34	43	3	2	1
255433	CLAIMS TAKERS--UNEMP BENEFITS	68	69	75	3	1	2
255443	AUDIO VISUAL SPECIALISTS	58	60	70	4	2	2
255483	UNDERWRITERS	116	125	164	12	10	2
29000	ALL OTHER PROFESSIONALS	917	953	1,122	52	41	11
	PROFESSIONALS SUBTOTAL	25,544	26,653	31,533	1,876	1,200	676
3 *****	TECHNICIANS						
310003	COMPUTER PROGRAMERS	174	183	221	10	9	1
310013	COMPUTER PROGRAMMERS--BUSINESS	41	44	54	3	3	0
310023	COMPUTER PROGRMRS--SCIENTFC/TECH	31	32	39	2	2	0
320033	DRAFTERS	506	536	657	38	30	8
320043	ELECTRICAL & ELECTRONIC TECHNS	1,478	1,504	1,740	66	52	14
320053	OBSERVERS--ELECT/GRAVITY PROSP	30	33	51	5	4	1
320083	SURVEYORS	388	407	483	21	19	2
320093	RADIOGRAPHERS	26	28	34	2	2	0

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					TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
320103	MECHANICAL ENGINEERING TECHNS	108	121	187	16	16	0
320123	TRAFFIC TECHNICIANS	11	12	13	0	0	0
320173	BROADCAST TECHNICIANS	59	59	68	3	2	1
320203	CIVIL ENGINEERING TECHNICIANS	190	208	289	23	20	3
320213	ESTIMATORS & DRAFTERS--UTILITIES	11	11	13	0	0	0
32900	ALL OTHER ENGINEERING TECHNS	778	831	1,105	77	65	12
330013	PHYSICAL SCIENCE TECHNICIANS	129	131	136	3	1	2
330023	BIOLOGICAL SCIENCE TECHNICIANS	563	569	591	14	6	8
33900	ALL OTHER SCIENCE TECHNICIANS	167	175	209	11	8	3
340023	AIR TRAFFIC CONTROLLERS	552	555	565	12	3	9
340033	DENTAL ASSISTANTS	279	297	362	26	17	9
340103	FLIGHT ENGINEERS	74	75	91	10	3	7
340133	LICENSED PRACTICAL NURSES	426	457	567	44	28	16
340163	PHYSICIANS ASSISTANTS	64	68	85	7	4	3
340193	MUSEUM TECHNICIANS & RESTORERS	12	13	16	1	1	0
340233	AIRPLANE PILOTS	1,056	1,078	1,297	57	48	9
340273	RADIO OPERATORS	71	72	87	7	3	4
340293	TECHNICAL ASSISTANTS-LIBRARY	45	46	51	1	1	0
340343	SURGICAL TECHNICIANS	18	19	24	1	1	0
340353	TAXIDERMISTS	14	15	19	1	1	0
340363	RADIOLOGIC TECHNICIANS	101	108	131	9	6	3
340473	PHARMACY HELPERS	24	26	32	3	2	1
340483	MEDICAL RECORD LIBRARIANS	40	42	48	5	2	3
350003	MEDICAL & DENTAL TECHNOLS/TECHNS	123	125	144	5	4	1
350013	DENTAL HYGIENISTS	103	110	137	13	7	6
350023	MEDICAL LAB TECHNOLOGISTS	149	158	188	12	8	4
350043	MICROBIOLOGY TECHNOLOGISTS	11	12	15	1	1	0
350103	MEDICAL LAB TECHNICIANS	81	87	109	8	6	2
350113	EKG TECHNICIANS	12	13	15	1	1	0
350133	EMERGENCY MEDICAL TECHNICIANS	11	12	13	0	0	0
350153	BLOOD BANK TECH SPECIALISTS	34	37	46	2	2	0
350163	PHYSICAL THERAPY ASSISTANTS	27	29	37	2	2	0
350183	RADIOLOGIC/NUCLEAR MEDICAL TECHS	41	44	55	4	3	1
35900	ALL OTHER MEDICAL & DENTAL TECHS	79	83	101	5	4	1
39000	ALL OTHER TECHNICIANS	684	704	802	34	24	10
	TECHNICIANS SUBTOTAL	8,821	9,169	10,927	565	421	144
4 =====	SERVICE WORKERS						
410013	CLEANERS--HEAVY	180	193	241	21	12	9
410023	CLEANERS--LIGHT	77	82	103	9	5	4
410033	MAIDS	1,071	1,146	1,427	122	71	51
410043	WINDOW WASHERS	23	25	31	3	2	1
410053	HOUSE CLEANERS	116	124	155	14	8	6
41900	ALL OTHER JANITRS/PORTRS/CLEANRS	4,042	4,238	5,082	395	208	187
420003	GUARDS & DOORKEEPERS	820	870	1,057	94	47	47
430013	BAKERS--BREAD & PASTRY	52	54	65	5	3	2
430023	BARTENDERS	1,331	1,409	1,750	119	84	35
430033	WAITERS ASSISTANTS	482	511	630	33	30	3
430043	BUTCHERS &/OR MEAT CUTTERS	283	296	360	22	15	7
430063	HOST/HOSTESSES-REST-LNGE-CFFE SH	123	131	162	12	8	4
430073	KITCHEN HELPERS	1,869	1,981	2,438	163	114	49
430093	WAITERS/WAITRESSES	3,152	3,332	4,115	290	193	97
430103	COUNTER ATTENDANTS	452	476	582	38	26	12
430113	COOKS-SHORT ORDER/SPEC FAST FOOD	586	619	768	58	36	22
430133	COOKS--RESTAURANT	902	955	1,187	90	57	33
430143	FOOD PREP & SERV WKRS--FAST FOOD	1,774	1,871	2,321	156	109	47
430153	PANTRY/SANDWICH &/OR COFFEE MAKR	121	128	160	11	8	3
430163	COOKS--INSTITUTIONAL	962	1,006	1,185	79	45	34
43900	ALL OTHER FOOD SERVICE WORKERS	912	943	1,120	65	42	23
440013	CHILD CARE ATTENDANTS	32	34	43	3	2	1
440023	BARBERS	42	45	56	5	3	2
440033	BELLHOPS/BAG PORTERS/DOORKEEPERS	76	82	102	5	5	0
440063	COSMETOLOGISTS &/OR HAIRSTYLISTS	311	333	414	32	21	11
440103	DETECTIVES	15	17	21	1	1	0
440123	FLIGHT ATTENDANTS	112	114	139	14	5	9
440143	SUPERVISORS--NONWORKING--SERVICE	257	272	342	23	17	6
440193	HOUSEKEEPERS	145	156	194	16	10	6
440253	NURSES AIDES/ORDERLIES	769	809	959	59	38	21

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440273	PROTECTIVE SIGNAL OPERATORS	15	17	21	1	1	0
440283	PSYCHIATRIC AIDES	130	140	174	13	9	4
440293	RECREATION FACILITY ATTENDANTS	123	131	160	12	7	5
440313	GAME OPS/RIDE OPS/CONCESS WORKRS	22	24	30	3	2	1
440333	STEWARDS--SHIP	93	95	104	6	2	4
440343	USHERS/LOBBY ATTNS/TICKER TAKERS	183	196	245	18	12	6
440403	INSTRUCTORS--REDUCING	19	20	25	2	1	1
440593	FOREST CONSERVATION WORKERS	65	66	71	2	1	1
440603	FISH & GAME WARDENS	30	30	31	1	0	1
440733	STORE DETECTIVES	34	36	45	2	2	0
440753	GUIDES--SIGHTSEEING OR ESTABLISH	24	25	30	2	1	1
440773	CHILD CARE WORKERS	498	533	660	49	32	17
440803	SOCIAL SERVICE AIDES	332	353	426	23	19	4
440813	MEDICAL ASSISTANTS	231	247	308	15	15	0
440843	SECURITY CHECKERS	39	40	49	4	2	2
440853	SCHOOL MONITORS	238	246	286	12	10	2
445013	POLICE/DETECTIVE SUPERVISORS	179	184	203	7	5	2
445023	POLICE DETECTIVES	174	178	193	6	4	2
445033	POLICE PATROL OFFICERS	753	775	857	31	21	10
445043	PARKING ENFORCEMENT OFFICER	11	12	13	0	0	0
445053	CORRECTION OFFICERS &/OR JAILERS	226	231	251	18	5	13
445073	BAILIFFS	12	12	13	0	0	0
445513	FIRE INSPECTORS	22	23	26	1	1	0
445523	FIRE FIGHTERS	373	385	427	14	11	3
445533	FIRE FIGHTING/PREVENT SUPERVISRS	70	72	82	3	2	1
49000	ALL OTHER SERVICE WORKERS	543	571	686	52	29	23
	SERVICE WORKERS SUBTOTAL	25,528	26,894	32,625	2,254	1,419	835
5 =====	CRAFTS,OPERS.,LABOR.						
510023	AIRCRAFT MECHANICS	868	885	1,052	54	37	17
510043	PROTECTIVE SIGNAL INSTALL/REPAIR	21	22	28	1	1	0
510083	AUTOMOTIVE MECHANICS	1,425	1,493	1,822	95	79	16
510123	AUTO BODY REPAIRERS	99	104	126	8	5	3
510163	BICYCLE REPAIRERS	23	24	30	1	1	0
510173	CAMERA REPAIRERS	17	18	22	1	1	0
510193	DIESEL MECHANICS	651	681	845	56	39	17
510203	ELECTRIC MOTOR REPAIRERS	27	29	36	2	2	0
510213	ELECTRIC TOOL REPAIRERS	18	19	21	1	1	0
510243	ELECTROMEDICAL EQUIPMT REPAIRERS	12	12	14	0	0	0
510273	ELECTRIC METER INSTALLERS	27	28	32	1	1	0
510343	ENGINEERING EQUIPMENT MECHANICS	826	850	981	52	31	21
510363	HYDROELECTRIC MACHINE MECHS	53	55	62	3	2	1
510393	LAUNDRY MACHINE MECHANICS	17	18	21	1	1	0
510403	LOCKSMITHS	22	23	28	1	1	0
510413	MINE MACHINERY MECHANICS	37	42	65	7	6	1
510423	MARINE MECHANICS/REPAIRERS	34	35	41	2	1	1
510433	MAINTENANCE MECHANICS	840	874	1,048	64	42	22
510463	OFFICE MACH/CASH REG SERVICERS	207	220	281	17	15	2
510513	RADIO MECHANICS	47	49	60	4	3	1
510523	REFRIG &/OR AIR COND MECHANICS	90	92	102	6	2	4
510553	TV SERVICERS & REPAIRERS (ETC)	14	15	19	1	1	0
510563	COIN MACHINE SERVICERS/REPAIRERS	12	12	15	1	1	0
510573	MOTORBOAT MECHANICS	59	62	77	4	4	0
510583	TREATMENT PLANT MECHANICS	16	16	18	0	0	0
510593	HOUSEHOLD APPLIANCE REPAIRERS	25	26	32	1	1	0
510663	CAR REPAIRERS	87	87	89	2	0	2
510773	ELECTRONIC MECHANICS	109	110	118	3	2	1
510803	GAS & ELECT APPLIANCE REPAIRERS	53	56	70	3	3	0
51900	ALL OTHER MECHANICS & REPAIRERS	544	556	658	27	23	4
520023	DEVELOPERS & PROJECTION PRINTERS	41	44	54	4	3	1
520053	MULTIPLE PHOTO PRINTER OPERATORS	11	12	15	1	1	0
52900	ALL OTHER DARKROOM WORKERS	5	5	7	0	0	0
530013	MARKERS/CLASSIFIERS--WET WASH	80	82	90	5	2	3
530043	WASHERS/STARCHERS--MACHINE	112	118	140	10	6	4
530063	DRYCLEANING MACHINE OPERATORS	98	105	130	10	6	4
530113	LAUNDRY OPERATORS--SMALL ESTABL	100	107	133	11	7	4
530143	PRESSERS--HAND	17	18	22	1	1	0
530153	PRESSERS--MACHINE	73	78	97	7	5	2

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530163	LAUNDRY PRESSERS--MACHINE	145	154	187	11	8	3
53900	ALL OTHR FABRIC/GARMNT CLEAN/REP	12	15	17	1	1	0
540003	TRUCK DRIVERS	2,661	2,765	3,332	162	134	28
540013	TRUCK DRIVERS--HEAVY	222	227	276	13	11	2
540023	TRUCK DRIVERS--LIGHT	237	242	294	13	11	2
540033	TRACTOR-TRAILER TRUCK DRIVERS	415	424	515	24	20	4
551A24	BOILERMAKERS	38	3[illegible]	42	4	1	3
551A31	BRICKLAYERS	62	63	72	3	2	1
551A36	BUS DRIVERS	532	553	657	38	25	13
551A38	CABINETMAKERS	40	42	50	3	2	1
551A39	CABLE DRILLERS	15	17	27	2	2	0
551A43	CABLE SPLICERS	85	85	92	4	1	3
551A47	CARPENTERS	2,137	2,188	2,522	142	77	65
551A51	CEMENT MASONS	199	202	232	9	7	2
551A54	CEMENTERS--OIL WELL	63	71	109	10	9	1
551A55	CENTRAL OFFICE REPAIRERS	80	82	93	4	3	1
551A71	TRAIN CONDUCTORS	28	28	29	0	0	0
551A75	CONTROL ROOM OPERATORS--STEAM	28	29	33	2	1	1
551A88	DERRICK OPERS-PETROL/GAS EXTRACT	96	108	167	15	14	1
551A93	MERCHAN DISPLAYERS/WINDOW TRIMRS	17	18	23	2	1	1
551A98	DREDGE OPERATORS	14	15	23	2	2	0
551B04	DRILLERS--MACHINE	15	16	22	1	1	0
551B12	ELECTRICIANS	1,366	1,399	1,630	101	53	48
551B15	AUXILIARY EQUIPMENT OPERATORS	20	21	24	1	1	0
551B24	FIRERS--LOCOMOTIVE	36	36	37	1	0	1
551B29	SUPERVISORS--NONWORKING	1,843	1,931	2,396	154	111	43
551B48	GLAZIERS	143	148	175	7	6	1
551B54	RIGGERS	59	60	69	3	2	1
551B59	INSTALLER-REPAIRERS/SECTN MAINT	213	216	243	9	7	2
551B60	INSTALLER-REPAIRERS--TELEPHONE	32	32	33	0	0	0
551B62	INSTRUMENT REPAIRERS	55	58	71	3	3	0
551B66	JEWELERS &/OR SILVERSMITHS	43	47	60	5	3	2
551B69	LATHERS	13	13	15	1	0	1
551B73	LINE INSTALLER-REPAIRERS	697	714	818	32	24	8
551B79	LOCOMOTIVE ENGINEERS	24	24	24	0	0	0
551B84	MACHINISTS	345	359	420	35	15	20
551B86	MAINTENANCE REPAIRERS--GEN UTIL	2,429	2,545	3,067	217	128	89
551B95	MILLWRIGHTS	144	149	181	13	7	6
551C04	OIL BURNER INSTALLERS/SERVICERS	15	16	19	2	1	1
551C11	PAINTERS--AUTOMOTIVE	28	30	38	4	2	2
551C14	PAINTERS--STRUCTURAL STEEL	19	19	22	2	1	1
551C16	PAPERHANGERS	16	16	19	1	1	0
551C28	PLASTERERS	50	51	58	2	2	0
551C30	PLUMBERS &/OR PIPEFITTERS	1,080	1,101	1,254	67	35	32
551C36	PRESS OPERS &/OR PLATE PRINTERS	24	26	34	2	2	0
551C40	MOTION PICTURE PROJECTIONISTS	34	37	46	2	2	0
551C42	STATION ENGINEERS--MAIN LINE	327	333	405	22	16	6
551C43	PUMPERS--HEAD	53	59	91	9	8	1
551C53	RIG BUILDERS	13	14	22	2	2	0
551C59	ROTARY DRILL OPERATORS	246	274	416	39	34	5
551C62	DENTAL LAB TECHNICIANS	38	40	50	3	2	1
551C69	SERVICE UNIT OPERATORS--OIL WELL	210	235	363	34	31	3
551C71	SEWAGE PLANT OPERATORS	136	145	173	12	7	5
551C81	SHEET METAL WORKERS	197	202	231	14	7	7
551C82	SHOOTERS OR SHOOTERS-SEISMOGRAPH	30	33	51	4	4	0
551C89	STATION INSTALLERS	11	11	13	0	0	0
551C91	STATIONARY ENGINEERS	255	263	312	16	11	5
551C92	STONE MASONS	15	15	16	0	0	0
551C96	STRUCTURAL STEEL WORKERS	153	155	178	9	5	4
551D01	SUBSTATION OPERATORS	56	58	65	4	2	2
551D03	SWITCHBOARD OPERS--GENERATING	17	18	20	1	1	0
551D05	ALTERATION TAILORS	51	55	68	3	3	0
551D11	TELEGRAPH EQUIPMENT MAINTAINERS	19	19	22	1	1	0
551D14	ANIMAL CARETAKERS	30	32	40	3	2	1
551D19	TILE SETTERS	15	15	17	0	0	0
551D47	WELL PULLERS	50	56	87	8	7	1
551D56	OFFSET LITHOGRAPHIC PRESS OPERS	121	134	175	13	11	2
551D58	STRIPPERS	10	11	14	1	1	0
551D59	CAMERA OPERATORS--PRINTING	24	27	34	2	2	0
551D69	OPTICIANS--DISP &/OR OPTIC MECHS	62	66	82	4	4	0
551D86	FURNITURE FINISHERS	16	17	20	1	1	0
551D87	FURNITURE UPHOLSTERERS	23	25	31	3	2	1

ESTIMATED EMPLOYMENT BY OCCUPATION AND GROWTH AND REPLACEMENT NEEDS
ALASKA

STATEWIDE

CODE	OES OCCUPATION TITLE	1981 EMPLOYMENT	1982 EMPLOYMENT	1986 EMPLOYMENT	AVE. ANNUAL JOB OPENINGS 1981 1986		
					TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
551D95	DISPATCHERS--LOAD	16	17	19	1	1	0
551E36	BAKERS	90	95	115	9	5	4
551F34	BUTCHERS--ALL-AROUND	32	33	37	1	1	0
551G14	CHEMICAL OPERATORS--A	20	20	23	1	1	0
551H/2	DIGESTER OPERATORS	12	12	14	0	0	0
551I31	ENGRAVERS--DECORATIVE	22	23	28	1	1	0
551I35	ETCHERS &/OR ENGRAVERS	11	13	17	1	1	0
551J83	HEAD SAWYERS	21	22	27	2	1	1
551K01	HOOK TENDERS	86	91	113	7	5	2
551K81	LOADER ENGINEERS	92	97	120	7	6	1
551K90	LUMBER GRADERS	18	19	24	1	1	0
551L34	WOOD MACHINISTS	32	34	43	2	2	0
551Q07	REFINERY OPERATORS--PETROLEUM	25	28	38	3	3	0
551R51	YARDER ENGINEERS	94	99	123	7	6	1
551S06	CEILING TILE/FLOOR INSTALLERS	35	36	42	1	1	0
551T03	HAND COMPOSITORS	14	16	21	1	1	0
551T50	BOATSWAINS	31	31	36	2	1	1
551T51	ABLE SEAMEN	82	83	93	4	2	2
551T54	SHIP ENGINEERS	122	124	137	5	3	2
551V05	BUS DRIVERS--SCHOOL	528	540	656	35	26	9
59001	ALL OTHER SKILLED CRAFTS WORKERS	530	557	706	47	35	12
552A08	ASBESTOS & INSULATION WORKERS	85	87	103	4	4	0
552A33	BLUEPRINT MACHINE OPERATORS	22	23	29	1	1	0
552A44	CARPET CUTTERS/LAYERS	36	38	46	2	2	0
552A79	COOKS &/OR COOKERS	22	23	25	1	1	0
552A82	CRANE/DERRICK/HOIST OPERATORS	253	259	302	13	10	3
552A83	CRATERS	16	16	16	1	0	1
552A84	CRUDE OIL TREATERS	118	133	205	19	17	2
552B05	DRY WALL APPLICATORS	85	87	99	7	3	4
552B17	EXTERMINATORS	14	15	17	1	1	0
552B18	FENCE ERECTORS	80	81	93	4	3	1
552B19	FILERS/GRINDERS/BUFFERS/CHIPPERS	11	13	17	1	1	0
552B26	FITTERS--PIPELAYING	13	14	18	1	1	0
552B43	GASMAKERS	11	11	14	1	1	0
552B45	NAT GAS TREATING UNIT OPERATORS	12	13	20	2	2	0
552B52	HEAVY EQUIPMENT OPERATORS	2,963	3,051	3,590	188	125	63
552B57	INDUSTRIAL TRUCK OPERATORS	418	432	498	25	16	9
552B58	INSPECTORS	79	84	110	7	6	1
552B93	MIXERS	18	18	20	0	0	0
552B96	MENDERS	13	14	18	2	1	1
552C02	MUD PLANT OPERATORS	23	26	40	3	3	0
552C05	OIL PUMPERS	46	52	80	8	7	1
552C23	PIPELAYERS	44	45	51	2	1	1
552C52	REINFORCING IRON WORKERS	59	60	69	3	2	1
552C58	ROOFERS	228	231	265	10	7	3
552C60	ROTARY DRILL OPERATOR HELPERS	147	164	254	24	21	3
552C61	ROUSTABOUTS	765	853	1,298	118	107	11
552C76	SEWING MACH OPS-REG EQMT-GARMENT	20	20	23	2	1	1
552C78	SEWING MACH OPS-REG EQMT-NONGAR	20	22	29	3	2	1
552C90	STATIONARY BOILER FIRERS	221	225	247	14	5	9
552D07	TAPERS	73	74	85	5	2	3
552D09	TAXI DRIVERS	121	123	150	12	6	6
552D22	TIRE FABRICATORS/REPAIRERS	43	46	57	4	3	1
552D27	LOGGING TRACTOR OPERATORS	70	74	92	7	4	3
552D43	WATER TREATMENT PLANT OPERATORS	84	87	96	4	2	2
552D46	WELDERS & FLAME CUTTERS	675	719	926	63	50	13
552D68	TIRE CHANGERS	59	62	77	4	4	0
552D74	STOCK CLERKS--SALES FLOOR	1,017	1,066	1,297	68	56	12
552D75	HIGHWAY MAINTENANCE WORKERS	75	78	88	4	3	1
552D88	SURVEYORS HELPERS	244	261	328	18	17	1
552E22	ASSEMBLERS	17	18	23	2	1	1
552E38	POWER BARKER OPERATORS	26	27	33	1	1	0
552F97	CHAIN OFFBEARERS--LUMBER	30	32	39	2	2	0
552G68	CONTROL PANEL OPERATORS--PETROL	10	11	15	1	1	0
552H19	CUT-OFF SAW OPERATORS--LUMBER	12	13	16	2	1	1
552H82	DOUGHNUT MAKERS/MACHINE OPERATRS	34	36	45	3	2	1
552I18	EDGERS--AUTOMATIC &/OR PONY	12	13	16	2	1	1
552I51	FALLERS &/OR BUCKERS	240	252	313	19	15	4
552K58	LATHE/TURN MACH OPERATORS--METAL	12	14	18	1	1	0
552K84	LOG HANDLING EQUIPMENT OPERATORS	93	98	122	8	6	2
552K85	LOG INSPECTORS/GRADERS/SCALERS	45	45	52	2	1	1
552M41	POND WORKERS--LUMBER	37	39	48	3	2	1

ESTIMATED EMPLOYMENT BY OCCUPATION AND GROWTH AND REPLACEMENT NEEDS
ALASKA

STATEWIDE

					AVE. ANNUAL JOB OPENINGS 1981 1986		
CODE	OES OCCUPATION TITLE	1981 EMPLOYMENT	1982 EMPLOYMENT	1986 EMPLOYMENT	TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
552N07	RESAWYERS	13	14	17	2	1	1
552N08	RETORT OPERATORS	47	48	53	2	1	1
552N13	RIGGING SLINGERS	83	87	109	6	5	1
552N63	SAW FILERS	16	17	21	1	1	0
552N89	SECOND LOADERS	13	14	17	1	1	0
552P14	SHELLFISH PROCESSING MACH TENDER	188	194	213	8	5	3
552P15	SHELLFISH SHUCKERS	74	77	84	3	2	1
552Q08	REFINERY OPERATOR HELPERS,P	11	13	17	1	1	0
552Q57	TESTERS	92	95	110	5	4	1
552Q88	TRIM SAW OPERATORS	14	15	18	2	1	1
552R67	ASPHALT RAKERS	53	54	62	3	2	1
552S22	CUTTING MACHING OPERATORS--FOOD	15	16	17	0	0	0
552S33	BODYMAKER OPERATORS--TIN CAN	25	26	28	1	1	0
552S35	FISH CLEANERS/BUTCHERS--HAND	1,931	1,989	2,187	79	51	28
552S97	RENTAL CAR DELIVERERS	15	17	21	2	1	1
552T11	PASTEUP WORKERS	49	55	74	6	5	1
552T23	LETTER PRESS OPERATORS	24	26	35	2	2	0
552T32	TRUCK DRIVER HELPERS	146	149	181	9	7	2
552T33	LINE SERVICE ATTENDANTS	689	705	859	45	34	11
552T38	MOBILE HOME SET-UP OPERATORS	25	26	32	2	1	1
552T39	PICTURE FRAMERS	16	17	21	2	1	1
552T48	CHAUFFEURS	46	48	58	4	2	2
552T52	ORDINARY SEAMEN	176	179	209	11	7	4
552T61	GRADERS--FOOD &/OR SKINS	52	53	59	2	1	1
552T63	SORTER OPERATORS--GREEN LUMBER	19	20	25	1	1	0
552T82	BINDERY WORKERS--ASSEMBLY	23	26	35	2	2	0
552U00	ASSEMBLERS	59	62	78	5	4	1
552V06	AMBULANCE DRIVER &/OR ATTENDANT	43	45	52	3	2	1
552V08	MOTORBOAT OPERATORS	21	23	28	1	1	0
59002	ALL OTHER SEMISKILLED WORKERS	1,076	1,130	1,421	83	69	14
553A04	AIR HAMMER OPERATORS	25	26	30	1	1	0
553A16	BAGGAGE HANDLERS	63	63	64	1	0	1
553A61	CLEANERS--VEHICLE	278	290	356	21	16	5
553A87	DELIVERY & ROUTE WORKERS	872	922	1,152	67	56	11
553B49	GROUND WORKERS--UTILITIES	35	37	42	2	1	1
553B87	HELPERS--TRADES	439	461	565	34	25	9
553C06	OILERS	193	199	235	14	8	6
553C08	ORDER FILLERS	197	210	268	16	14	2
553C12	PAINTERS--MAINTENANCE	479	490	560	30	16	14
553C23	PIPELAYERS	72	73	84	3	2	1
553C39	PRODUCTION PACKAGERS	212	222	264	16	10	6
553C51	REFUSE COLLECTORS	75	78	88	4	3	1
553D14	ANIMAL CARETAKERS	26	27	30	2	1	1
553D22	TIRE FABRICATORS/REPAIRERS	11	12	15	1	1	0
553D64	PIN CHASERS	11	12	15	1	1	0
553D66	BAGGERS	406	428	531	38	25	13
553D67	SERVICE STA ATTENDNTS/LUBRICATRS	767	809	1,001	52	47	5
553G04	CHASERS--LOGGING	130	137	170	10	8	2
553G20	CHIPPERS	20	21	25	1	1	0
553G22	CHOKER SETTERS--LUMBER	217	227	283	16	13	3
553G78	COOLER ROOM WORKERS--MEAT	33	34	38	2	1	1
553H73	DIGESTER OPERATOR HELPERS	18	18	20	0	0	0
553K91	LUMBER STRAIGHTENERS	12	13	16	1	1	0
553M74	PULPERS	11	11	12	0	0	0
553S25	BAILING MACHINE OPERATORS	10	10	11	0	0	0
553S47	CANNERY WORKERS	4,956	5,104	5,613	208	131	77
553T47	GARDENERS & GROUNDSKEEPERS	255	267	319	17	13	4
553T60	WASHERS AND/OR SEPARATORS	165	170	187	7	4	3
553T62	EQUIPMENT CLEANER--HAND	30	30	33	1	1	0
59003	ALL OTHER UNSKILLED WORKERS	6,493	6,679	7,688	341	239	102
560023	BRICKLAYER HELPERS	55	56	64	3	2	1
560033	CARPENTER HELPERS	335	340	392	17	11	6
560043	CEMENT MASON HELPERS	66	67	77	3	2	1
560053	ELECTRICIAN HELPERS	78	79	91	4	3	1
560063	PAINTER HELPERS	13	13	15	0	0	0
560093	PLASTERER HELPERS	13	13	15	0	0	0
560103	PLUMBER OR PIPEFITTER HELPERS	86	87	100	5	3	2
56900	ALL OTH HELPERS--SKILLED TRADES	65	67	79	4	3	1
57900	ALL OTHR MIXING/BATCHING/BLENDNG	12	13	17	1	1	0
580093	LAMINATORS--PREFORMS	28	31	42	3	3	0
	CRAFTS,OPERS.,LABOR. SUBTOTAL	57,969	60,201	71,786	3,886	2,758	1,128

ESTIMATED EMPLOYMENT BY OCCUPATION AND GROWTH AND REPLACEMENT NEEDS
ALASKA

STATEWIDE

					AVE. ANNUAL JOB OPENINGS 1981 1986		
CODE	OES OCCUPATION TITLE	1981 EMPLOYMENT	1982 EMPLOYMENT	1986 EMPLOYMENT	TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
6 =====	CLERICAL WORKERS						
611033	BOOKKEEPING/BILLING MACH OPERS	346	366	457	37	22	15
611053	COMPUTER OPERATORS	205	216	264	17	12	5
611073	KEYPUNCH OPERATORS	290	303	362	24	14	10
611093	PERIPHERAL EDP EQPT OPERATORS	30	31	40	3	2	1
611123	PROOF MACHINE OPERATORS	104	112	148	14	9	5
611203	DUPLICATING MACHINE OPERATORS	28	28	33	3	1	2
611213	COIN MACHINE OPR/CURRENCY SORTER	15	16	21	1	1	0
61199	ALL OTHER OFFICE MACHINE OPERS	56	58	67	3	2	1
612003	STENOGRAPHERS	305	320	384	27	16	11
613013	ACCOUNTING CLERKS	1,745	1,823	2,192	143	89	54
613053	RESERVATION AGENTS	193	197	239	15	9	6
613073	BOOKKEEPERS--HAND	2,310	2,433	2,993	209	137	72
613093	CALL-OUT OPERATORS	22	24	30	3	2	1
613123	CAR RENTAL CLERKS	54	58	72	7	4	3
613133	ADJUSTMENT CLERKS	139	148	191	15	10	5
613143	CASHIERS	2,826	2,982	3,693	253	173	80
613153	CHECKING CLERKS--BANK RECORDS	26	27	36	3	2	1
613163	CLAIM ADJUSTERS	105	112	146	11	8	3
613183	CLAIMS CLERKS	43	46	57	4	3	1
613193	COLLECTORS	238	254	323	28	17	11
613243	COUNTER CLERKS	193	207	257	18	13	5
613253	DESK CLERKS--BOWLING FLOOR	28	30	37	3	2	1
613273	CREDIT REPORTERS	17	18	24	2	1	1
613303	FILE CLERKS	419	447	567	44	30	14
613323	INSURANCE CLERKS	22	24	32	3	2	1
613333	GENERAL CLERKS--OFFICE	5,366	5,596	6,654	382	258	124
613353	DESK CLERKS	340	366	464	44	25	19
613373	INFORMATION CLERKS	31	32	34	2	1	1
613393	LIBRARY ASSISTANTS	481	499	575	45	19	26
613433	MAIL CLERKS	139	143	164	8	5	3
613443	CREDIT AUTHORIZERS	27	28	35	3	2	1
613473	MESSENGERS--BANK	14	15	20	1	1	0
613483	INSURANCE CLERKS--MEDICAL	113	121	151	11	8	3
613493	NEW ACCOUNTS TELLERS	141	152	200	18	12	6
613503	ORDER CLERKS	149	158	200	18	10	8
613513	PAYROLL &/OR TIMEKEEPING CLERKS	463	482	571	38	22	16
613523	PERSONNEL CLERKS	238	245	280	15	8	7
613533	POLICY CHANGE CLERKS	18	19	26	2	2	0
613553	PROCUREMENT CLERKS	74	75	81	3	1	2
613583	RATERS	63	67	89	7	5	2
613603	REAL ESTATE CLERKS	101	103	116	5	3	2
613613	RECEPTIONISTS	795	848	1,058	84	53	31
613653	SAFE DEPOSIT CLERKS	32	34	45	4	3	1
613683	SECRETARIES	4,703	4,944	5,997	454	259	195
613703	SERVICE OBSERVERS	42	42	50	3	2	1
613723	STATEMENT CLERKS	61	65	86	7	5	2
613733	SERVICE CLERKS	31	33	41	3	2	1
613743	STATISTICAL CLERKS	98	102	120	6	4	2
613753	SURVEY WORKERS	12	12	15	1	1	0
613763	SWITCHBOARD OPERATORS	334	353	426	29	18	11
613773	SWITCHBD OPER-RECEPTIONISTS	346	370	472	39	25	14
613803	MESSENGERS	182	196	250	15	14	1
613823	TELLERS	870	936	1,234	108	73	35
613833	TICKET AGENTS	566	577	701	40	27	13
613843	TITLE SEARCHERS	22	24	32	3	2	1
613863	TRAFFIC CLERKS	14	14	17	1	1	0
613893	TRANSIT CLERKS	11	11	15	1	1	0
613913	TRAVEL CLERKS	15	15	16	0	0	0
613923	TYPISTS	3,252	3.358	3,813	226	112	114

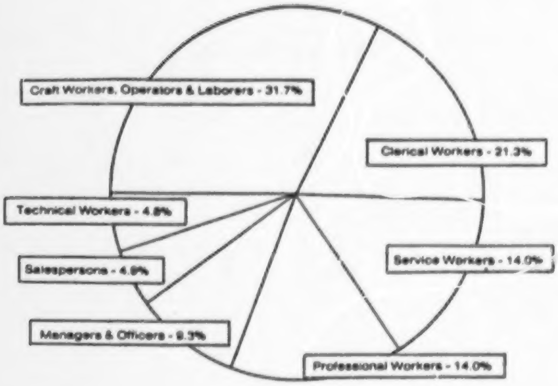
ESTIMATED EMPLOYMENT BY OCCUPATION AND GROWTH AND REPLACEMENT NEEDS ALASKA

STATEWIDE

CODE	OES OCCUPATION TITLE	1981 EMPLOYMENT	1982 EMPLOYMENT	1986 EMPLOYMENT	AVE. ANNUAL JOB OPENINGS 1981 1986		
					TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
613963	CLERICAL SUPERVISORS	855	904	1,125	78	54	24
614103	TEACHER AIDES	1,382	1,440	1,691	94	62	32
614163	CIRCULATION CLERKS	23	25	34	3	2	1
614193	TELEPHONE AD TAKERS--NEWSPAPER	29	32	44	5	3	2
614213	CREDIT CLERKS	138	148	196	16	12	4
614223	MORTGAGE CLOSING CLERKS	147	158	208	16	12	4
614233	CLAIM EXAMINR--LIFE/ACCIDNT/HLTH	90	97	128	10	8	2
614243	SORTING CLERKS,BANK	11	11	15	1	1	0
614253	COURT CLERKS	236	241	261	12	5	7
614263	TOWN CLERKS	97	100	112	6	3	3
614273	POSTAL SERVICE CLERKS	272	274	279	10	1	9
614283	DIRECTORY ASSISTANCE OPERATORS	70	70	82	4	2	2
614293	TELEGRAPH OPERATORS	81	81	96	4	3	1
614303	CENTRAL OFFICE OPERATORS	380	382	446	25	13	12
614343	LOAN CLOSERS	83	89	118	9	7	2
614353	CUSTOMER SERVICE REPRESENTATIVES	128	131	151	8	5	3
614363	LICENSE CLERKS	13	14	15	0	0	0
61900	ALL OTHER OFFICE CLERICAL WORKRS	886	917	1,074	58	38	20
620023	METER READERS--UTILITIES	43	45	51	3	2	1
620033	PRODUCTION CLERKS/COORDINATORS	166	172	208	12	8	4
620043	SHIPPING PACKERS	425	443	533	31	22	9
620053	SHIPPING & RECEIVING CLERKS	389	410	520	34	26	8
620073	WEIGHERS--RECORD KEEPING	69	71	80	3	2	1
620083	STOCK CLERKS-STOCKROOM/WAREHOUSE	1,758	1,847	2,281	150	105	45
620123	DISPATCHERS--AIRPLANE	95	97	118	9	5	4
620153	TRANSPORTATION AGENTS	657	670	814	50	31	19
620183	DISPATCHER--VEHICLE SERV OR WORK	227	236	291	18	13	5
620243	MARKING CLERKS	61	65	80	5	4	1
620253	DISPATCHERS--POLICE/FIRE/AMBUL	251	259	288	18	7	11
620323	POSTAL MAIL CARRIERS	589	592	603	31	3	28
620353	RATE CLERKS--FREIGHT	18	19	22	1	1	0
62900	ALL OTHER PLANT CLERICAL WORKERS	366	375	422	19	11	8
	CLERICAL WORKERS SUBTOTAL	38,938	40,730	49,099	3,259	2,036	1,223
7 =====	SALES PEOPLE						
710043	CRATING & MOVING ESTIMATORS	17	17	21	2	1	1
710083	SALES AGENTS/REPS--REAL ESTATE	88	95	125	10	7	3
710093	SALES AGENTS--SECURITIES	32	34	45	3	3	0
710103	TRAFFIC AGENTS	29	29	36	2	1	1
710123	SALES AGENTS/REPS--INSURANCE	264	283	374	29	22	7
710163	BROKER/MARKET OPERS--COMMODITIES	17	18	24	1	1	0
719983	SALES REPS/AGENTS--TECHNICAL	752	797	1,015	63	53	10
719993	SALES REPS/AGENTS--NON-TECHNICAL	1,927	2,038	2,565	154	128	26
71900	ALL OTHER SALES AGENTS & REPS	887	941	1,188	88	60	28
720023	SALES CLERKS	4,838	5,102	6,315	455	295	160
720073	SALES CLERK SUPERVISORS	35	36	45	3	2	1
79000	ALL OTHER SALES WORKERS	16	18	24	2	2	0
	SALES PEOPLE SUBTOTAL	8,902	9,408	11,777	812	575	237
-===							
	GRAND TOTAL	182,780	190,921	229,276	14,025	9,299	4,726

1/ Estimated Employment by Occupation and Growth and Replacement Need is available for Anchorage and Fairbanks by special request to Research & Analysis.

GRAPH V-1



ALASKA STATEWIDE EMPLOYMENT ESTIMATES
PERCENT DISTRIBUTION OF MAJOR OCCUPATIONAL GROUPS
1981

OCCUPATIONAL SUPPLY AND DEMAND

Records of the Employment Security Automated Reporting Sytstem (ESARS) were used to prepare data on occupational supply and demand. Data in Table V-2 are limited to occupations having 50 or more experienced applicants. ESARS data do not encompass all occupational supply and demand information. For instance, construction trades have a substantial number of union members who are not well represented. These workers are generally dispatched from union hiring halls, not Employment Security (ES) Offices. Many professional positions are filled by private agencies, individually presented resumes and interviews, trade papers, and the informal word-of-mouth network. However, Employment Service Offices do provide one of the more readily available and concentrated sources of current labor supply information. A ratio of applicants to job openings can be used as an indicator of supply or demand. However, analysts do not always agree on the interpretation of ratios. For instance, some analysts believe a ratio of 2.0 (or higher) to be in balance. Further, ratios say nothing about a qualitative match.

ESARS data show that the Clerical and Sales and Services categories have the highest demand. During the year (October 1980 through September 1981) the Clerical and Sales category had approximately 12,300 job openings, while the Services category shows approximately 11,500. During the same time period there were approximately 5,300 job openings received for cannery workers.

First glance at the ESARS table indicates an adequate supply of registered applicants in most occupations to fill job openings received. However, several occupations have a high percent of unfilled or cancelled job openings. For example, in the Professional, Technical and Managerial category there were 3.9 applicants for every job opening received, yet 43 percent of all professional jobs were unfilled or cancelled. A survey of

TABLE V-2
STATEWIDE
ACTIVE APPLICANTS, JOB ORDERS RECEIVED AND OPENINGS FILLED BY OCCUPATIONAL TITLE 1/
(WITH 50 OR MORE APPLICANTS)
October 1980 - September 1981

Occupation Codes	Occupations	Experienced Active Applicants	Job Openings Received	Openings Filled	Openings Unfilled or Cancelled	Percent Unfilled or Cancelled	Ratio Active Applicants To Job Openings2/
0-1	**Professional, Technical & Managerial**	9,905	2,570	1,472	1,098	43	3.9
003161014	Electronics Technician	148	40	32	8	20	3.7
005061014	Civil Engineer	80	31	7	24	77	2.6
005281010/ 005281014 005281014	Drafter, Civil & Structural	55	65	40	25	38	0.9
041061030	Biologist	229	15	9	6	40	15.3
045107010	Counselor	329	59	38	21	36	5.6
075374010	Nurse, General Duty	153	47	34	13	28	3.3
079367010	Medical Assistant	54	7	4	3	43	7.7
079371010	Dental Assistant	141	38	24	14	37	3.7
079374014	Nurse, Licensed Practical	108	28	17	11	39	3.9
091227010	Teacher, Secondary Edu.	149	9	1	8	89	16.6
092227010	Teacher, Elem. School	260	12	10	2	17	21.7
160167010	Accountant	179	46	23	23	50	3.9
162157038	Purchasing Agent	143	23	13	10	43	6.2
163167018	Manager, Sales	66	9	7	2	22	7.3
165067010	Public Relations Representatives	81	12	6	6	50	6.8
169167010	Administrative Assistant	482	77	51	26	34	6.3
169167034	Manager, Office	224	36	24	12	33	6.2
185167046	Manager, Retail Store	180	16	10	6	38	11.3
187167106	Manager, Food Service	173	22	11	11	50	7.9
193162018	Air-Traffic Control Specialist, Tower	70	6	5	1	17	11.7
195107010	Caseworker	87	10	4	6	60	8.7
2	**Clerical & Sales**	18,011	12,306	7,749	4,557	37	1.5
	Clerical	15,063	9,990	6,447	3,543	35	1.5
201362010	Legal Secretaries	368	130	78	52	40	2.8
201362030	Secretary	1,135	599	375	224	37	1.9
203362010	Clerk-Typist	983	1,015	759	256	25	0.9
203582030	Keypunch Operator	140	80	45	35	44	1.8
206362010	File Clerk	85	217	162	55	25	0.4
209562010	Clerk, General	2,629	1,308	959	349	27	2.0
209587026	Mail Clerk	69	117	50	67	57	0.6
210382010	Audit Clerk	58	21	15	6	29	2.8
210382014	Bookkeeper	844	515	285	230	45	1.6
211362010	Cashier	997	225	127	98	44	4.4
211362018	Teller	215	323	217	106	33	0.7
213362010	Computer Operator	115	19	13	6	32	6.1
215482010	Payroll Clerk	66	51	28	23	45	1.3
216482010	Accounting Clerk	715	447	261	186	42	1.6
219362010	Administrative Clerk	1,478	804	440	364	45	1.8
222387058	Stock Clerk	367	149	94	55	37	2.5
235662022	Telephone Operator	163	117	62	55	47	1.4
237367038	Receptionist	735	568	304	264	46	1.3
238362010	Hotel Clerk	113	191	124	67	35	0.6
238367026	Ticket Agent	50	23	20	3	13	2.2
249367074	Teacher Aide	130	44	40	4	9	3.0

TABLE V-2
STATEWIDE
ACTIVE APPLICANTS, JOB ORDERS RECEIVED AND OPENINGS FILLED BY OCCUPATIONAL TITLE 1/
(WITH 50 OR MORE APPLICANTS)
October 1980 - September 1981
(Continued)

	Sales	2,948	2,316	1,302	1,014	44	1.3
279357050	Salesperson, General Hardware	55	63	29	34	54	0.9
279357054	Salesperson, General Merchandise	492	238	124	114	48	2.1
290477014	Salesperson, Parts	91	93	54	39	42	1.0
	Sales Clerk	971	434	302	132	30	2.2
292353010	Sales Clerk, Food	106	58	47	11	19	1.8
	Driver, Sales Route	59	44	29	15	34	1.3
3	**SERVICES**	11,294	11,508	7,616	3,892	34	0.9
30	**DOMESTIC SERVICES**	702	1,688	1,333	355	21	0.4
31	**SERVICES, PUBLIC ORIENTATED**	6,390	6,272	3,731	2,541	41	1.0
311477014	Counter Attendant, Lunchroom or Coffee Shop	259	453	225	228	50	0.6
312474010	Bartender	614	199	110	89	45	3.1
313131014	Chef	53	13	9	4	31	4.1
313361014	Cook, Restaurant	727	650	460	190	29	1.1
313361022	Cook, Short Order	356	517	228	289	56	0.7
315361010	Cook, Mess	500	197	119	78	40	2.5
316684018	Meat Cutter	72	16	8	8	50	4.5
317684014	Pantry Goods Maker	71	101	41	60	59	0.7
317687010	Cook Helper	92	31	23	8	26	3.0
318687010	Kitchen Helper	782	1,127	809	318	28	0.7
323687014	Scullion	453	552	380	172	31	0.8
332271010	Cosmetologist	68	17	3	14	82	4.0
355674014	Nurse Aide	447	80	58	22	28	5.6
359677010	Attendant, Children's Institution	62	64	47	17	27	1.0
359677018	Nursery School Attendant	214	265	176	89	34	0.8
372667034	Guard, Security	176	159	105	54	34	1.1
372667038	Merchant Patroller	70	13	11	2	15	5.4
373364010	Fire Fighter	90	103	62	41	40	0.9
375263014	Police Officer	86	9	6	3	33	9.6
382664010	Janitor	625	426	352	74	17	1.5
4	**Agricultural, Fishery, Forestry**	1,696	2,010	1,854	156	8	0.8
452364010	Forester Aide	184	117	109	8	7	1.6
452687014	Forest-Fire Fighter	187	370	372	—	—	0.5
5	**Processing Occupations**	2,297	5,585	5,140	445	8	0.4
526381010	Baker	65	17	10	7	41	3.8
529686014	Cannery Worker	1,898	5,290	4,884	406	8	0.4

TABLE V-2
(Continued)

6	**Machine Trade Occup.**	2,782	871	560	311	36	3.2
600280022	Die Sinker	95	13	8	5	38	7.3
620261010	Automobile Mechanic	581	227	138	89	39	2.6
620261022	Construction-Equipment Mechanic	246	79	55	24	30	3.1
620281046	Maintenance Mechanic, Shop	61	15	11	4	27	4.1
621281014	Airframe-and-Power Plant Mechanic	123	31	17	14	45	4.0
625281010	Diesel Mechanic	221	83	65	18	22	2.7
625281034	Small-Engine Mechanic	50	24	16	8	33	2.1
638281014	Maintenance Mechanic, Machine Servicer	87	17	5	12	71	5.1
638281018	Millwright	52	17	10	7	41	3.1
7	**Benchwork**	482	276	161	115	42	1.8
8	**Structural Work**	10,535	5,344	4,556	788	15	2.0
807381010	Automobile-Body Repairer	115	46	24	22	48	2.5
819384010	Welder, Combination	378	61	49	12	20	6.2
824261010	Electrician	271	114	79	35	31	2.4
828281010	Electronics Mechanic	126	28	13	15	54	4.5
840381010	Painter	188	166	145	21	13	1.1
844364010	Cement Mason	86	47	37	10	21	1.8
850683010	Bulldozer Operator	139	30	14	16	53	4.6
859683010	Operating Engineer	944	112	97	15	13	8.4
860381022	Carpenter	1,317	640	522	118	18	2.1
862381018	Pipe Fitter	88	20	13	7	35	4.4
862381030	Plumber	134	65	37	28	43	2.1
866381010	Roofer	72	18	15	3	17	4.0
869664014	Construction Worker	2,323	1,739	1,609	130	7	1.3
899381010	Maintenance Repairer	539	247	171	76	31	2.2
9	**Misc. Occupations**	6,360	5,536	4,637	899	16	1.2
	Motor Freight & Transportation	2,773	1,542	1,168	374	24	1.8
905663014	Truck Driver, Heavy	845	112	78	34	30	7.5
906683022	Truck Driver, Light	359	139	82	57	41	2.6
913463010	Bus Driver	312	230	226	4	2	1.4
913463018	Taxi Driver	50	77	64	13	17	0.7
915467010	Automobile-Service-Station Attendant	316	276	181	95	34	1.1
919687014	Cleaner, Vehicles	50	120	74	46	38	0.4
	Packaging & Materials Handling	2,809	3,710	3,291	419	11	0.8
920587018	Packager, Hand	70	36	21	15	42	1.9
920687014	Bagger, Grocery	89	235	160	75	32	0.4
929687030	Material Handler	918	2,270	2,097	173	8	0.4
	Mining						
930684026	Rotary-Driller Helper	87	0	0	—	—	—

Source: Alaska Department of Labor, Employment Security Automated Reporting System (ESARS), Table 96.

1/ 2 Digit Dictionary of Occupational Title Codes [4th Edition].

2 A ratio in excess of 1.0 indicates an excess of applicants over job openings [supply] and a ratio less than 1.0 indicates more openings than applicants [demand].

TABLE V-3
CHARACTERISTICS OF ALASKA'S EMPLOYMENT SERVICE APPLICANTS
October 1980 - September 1981

	Percentage Distribution/1
TOTAL	100.0
AGE	
15 & Under	1.3
16-17	5.1
18-19	9.5
20-21	10.2
22-25	15.2
25-29	21.0
30-34	14.1
35-39	8.1
40-44	5.4
45-54	6.5
55-64	3.0
65 & Over	0.5
SEX	
Male	54.6
Female	45.4
HIGHEST SCHOOL GRADE	
0-7	1.6
8-11	20.0
12	45.7
Over 12	32.7
RESIDENCE	
Urban	69.7
Rural	30.3
ETHNIC GROUP	
White (Not Hispanic)	78.8
Black (Not Hispanic)	4.6
Hispanic	1.8
Amer. Indian & Alaska Native	12.3
Asian & Pacific Islander	2.1
INA	0.5
VETERAN	18.0
Disabled	0.9
Vietnam Era	9.6
Special Veteran	3.1
HANDICAPPED	3.5
Physically Disabled	3.4
Mentally Retarded	—
Mentally Restored	—
ECONOMICALLY DISADVANTAGED	20.5
FOOD STAMP WORK REQ.	15.1
WELFARE	4.2
W.I.N.	2.9
CETA	0.7
EMPLOYMENT STATUS	
Full Time	3.4
Part Time	2.1
Not Working	94.5

1/ *May not add due to rounding.*

Source: ESARS Table 6 (excludes partially registered applicants).

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local office personnel conducted this summer indicated the reason for the high unfilled or cancelled ratios was lack of experienced and/or skilled applicants (See Alaska Economic Trends, October 1981). Occupations with the highest ratios of applicants to job openings were teachers, (in secondary education and elementary school), and biologists. Characteristics of Alaska's ES applicants are summarized in Table V-3.

OFFICE SUMMARY

Table V-4 summarizes occupational supply and demand data by each of Alaska's Employment Service Offices. While data are summarized at the 2 digit Dictionary of Occupational Titles (DOT) code, a more detailed breakdown is available by request.

TABLE V-4
APPLICANTS AND JOB OPENINGS BY OCCUPATIONAL 1/ CATEGORY BY EMPLOYMENT SERVICE OFFICE
October 1980 - September 1981

Primary Occupation Category	Occupation	Total Active Applicants	Experienced Applicants	Entry Level Applicants	Job Openings Received	Job Openings Filled	Ratio Active Applicants To Job Openings 2/
STATE	(Total Entries)	72,254	63,362	8,892	46,006	33,745	1.6
0-1	Professional, Technical Managerial	10,553	9,905	648	2,570	1,472	4.1
2	Clerical & Sales	20,824	18,011	2,813	12,306	7,749	1.7
3	Services	13,336	11,294	2,042	11,508	7,616	1.2
4	Farming, Forestry, Fishery	2,117	1,696	421	2,010	1,854	1.1
5	Processing	2,921	2,297	624	5,585	5,140	0.5
6	Machine Trades	3,029	2,782	247	871	560	3.5
7	Bench Work	511	482	29	276	161	1.9
8	Structural Work	11,355	10,535	820	5,344	4,556	2.1
9	Miscellaneous	7,608	6,360	1,248	5,536	4,637	1.4
REGION 1	Southeast (Local Office 1100, 1200, 1300, 1400)	12,885	11,178	1,707	8,188	6,587	1.6
0-1	Professional, Technical Managerial	1,840	1,688	152	491	307	3.7
2	Clerical & Sales	3,703	3,048	655	2,304	1,778	1.6
3	Services	2,223	1,908	315	1,815	1,376	1.2
4	Farming, Forestry, Fishery	702	537	165	568	518	1.2
5	Processing	575	501	74	1,316	1,126	0.4
6	Machine Trades	436	392	44	100	70	4.4
7	Bench Work	46	43	3	27	21	1.7
8	Structural Work	1,809	1,635	174	757	660	2.4
9	Miscellaneous	1,551	1,426	125	810	731	1.9
JUNEAU	(Local Office 1100)	5,410	4,561	849	3,815	2,978	1.4
0-1	Professional, Technical Managerial	1,074	973	101	268	186	4.0
2	Clerical & Sales	1,983	1,587	396	1,634	1,244	1.2
3	Services	907	759	148	1,012	769	0.9
4	Farming, Forestry, Fishery	136	105	31	123	117	1.1
5	Processing	132	102	30	72	62	1.8
6	Machine Trades	163	145	18	39	28	4.2
7	Bench Work	12	11	1	7	4	1.7
8	Structural Work	748	653	95	435	376	1.7
9	Miscellaneous	255	226	29	225	192	1.1
SITKA	(Local Office 1200)	2,024	1,517	507	863	686	2.3
0-1	Professional, Technical Managerial	225	196	29	47	13	4.8
2	Clerical & Sales	447	304	143	146	89	3.1
3	Services	403	307	96	212	161	1.9
4	Farming, Forestry, Fishery	213	119	94	223	209	1.0
5	Processing	57	36	21	32	32	1.8
6	Machine Trades	71	54	17	10	8	7.1
7	Bench Work	9	8	1	4	4	2.3
8	Structural Work	279	232	47	66	56	4.2
9	Miscellaneous	320	261	59	123	114	2.6

TABLE V-4
APPLICANTS AND JOB OPENINGS BY OCCUPATIONAL 1/ CATEGORY
BY EMPLOYMENT SERVICE OFFICE
October 1980 - September 1981
(Continued)

Primary Occupation Category	Occupation	Total Active Applicants	Experienced Applicants	Entry Level Applicants	Job Openings Received	Job Openings Filled	Ratio Active Applicants To Job Openings 2/
KETCHIKAN	(Local Office 1300)	3.371	3.209	162	2,354	1.993	1.4
0-1	Professional, Technical Managerial	325	314	11	138	85	2.4
2	Clerical & Sales	773	723	50	463	387	1.7
3	Services	531	506	25	513	373	1.0
4	Farming, Forestry, Fishery	223	198	25	194	178	1.1
5	Processing	156	147	9	416	419	0.3
6	Machine Trades	127	127	0	49	32	2.6
7	Bench Work	17	13	4	14	11	1.2
8	Structural Work	485	470	15	164	139	3.0
9	Miscellaneous	734	711	23	403	369	1.8
PETERSBURG	(Local Office 1400)	784	764	20	1.151	925	0.7
0-1	Professional, Technical Managerial	64	64	0	35	20	1.8
2	Clerical & Sales	135	134	1	60	57	2.3
3	Services	108	104	4	77	72	1.4
4	Farming, Forestry, Fishery	65	60	5	28	14	2.3
5	Processing	178	174	4	796	613	0.2
6	Machine Trades	26	26	0	2	2	13.0
7	Bench Work	4	4	0	2	2	2.0
8	Structural Work	114	110	4	92	89	1.2
9	Miscellaneous	90	88	2	59	56	1.5
REGION II	Fairbanks, Barrow (Local Office 4200, 4300)	14,216	12.195	2.021	7.108	5.606	2.0
0-1	Professional, Technical Managerial	2.053	1,911	142	526	344	3.9
2	Clerical & Sales	4,430	3,689	741	2,036	1,404	2.2
3	Services	2,439	1.984	455	1,759	1,257	1.4
4	Farming, Forestry, Fishery	286	192	94	516	504	0.6
5	Processing	136	105	31	79	78	1.7
6	Machine Trades	663	577	86	163	136	4.1
7	Bench Work	104	98	6	65	46	1.6
8	Structural Work	2,677	2,447	230	1,242	1,171	2.2
9	Miscellaneous	1.428	1,192	236	722	666	2.0
FAIRBANKS	(Local Office 4200)	13,562	11.592	1,970	6.674	5.334	2.0
0-1	Professional, Technical Managerial	2,013	1,872	141	463	309	4.3
2	Clerical & Sales	4,256	3.530	726	1,923	1,334	2.2
3	Services	2,361	1,915	446	1,678	1,214	1.4
4	Farming, Forestry, Fishery	273	187	86	508	496	0.5
5	Processing	133	103	30	78	77	1.7
6	Machine Trades	638	552	86	152	130	4.2
7	Bench Work	102	96	6	65	46	1.6
8	Structural Work	2,411	2,190	221	1,164	1,106	2.1
9	Miscellaneous	1,375	1,147	228	643	622	2.1

TABLE V-4
APPLICANTS AND JOB OPENINGS BY OCCUPATIONAL // CATEGORY BY EMPLOYMENT SERVICE OFFICE
October 1980 - September 1981
(Continued)

Primary Occupation Category	Occupation	Total Active Applicants	Experienced Applicants	Entry Level Applicants	Job Openings Received	Job Openings Filled	Ratio Active Applicants To Job Openings 2/
BARROW	(Local Office 4300)	654	603	51	434	272	1.5
0-1	Professional, Technical Managerial	40	39	1	63	35	0.6
2	Clerical & Sales	174	159	15	113	70	1.5
3	Services	78	69	9	81	43	1.0
4	Farming, Forestry, Fishery	13	5	8	8	8	1.6
5	Processing	3	2	1	1	1	3.0
6	Machine Trades	25	25	0	11	6	2.3
7	Bench Work	2	2	0	0	0	—
8	Structural Work	266	257	9	78	65	3.4
9	Miscellaneous	53	45	8	79	44	0.7
REGION III	Nome, Kotzebue (Local Office 4400, 4600)	1,549	2,374	195	492	449	3.1
0-1	Professional, Technical Managerial	145	1,354	9	52	33	2.8
2	Clerical & Sales	370	136	36	162	161	2.3
3	Services	333	268	65	110	102	3.0
4	Farming, Forestry, Fishery	25	20	5	7	6	3.6
5	Processing	71	37	34	42	37	1.7
6	Machine Trades	35	34	1	5	4	7.0
7	Bench Work	13	11	2	1	1	13.0
8	Structural Work	423	394	29	70	65	6.0
9	Miscellaneous	134	120	14	43	40	3.1
NOME	(Local Office 4400)	1,169	1,019	150	417	373	2.8
0-1	Professional, Technical Managerial	112	104	8	47	24	2.4
2	Clerical & Sales	308	276	32	151	149	2.0
3	Services	269	208	61	100	87	2.7
4	Farming, Forestry, Fishery	16	11	5	3	5	5.3
5	Processing	17	14	3	32	29	0.5
6	Machine Trades	28	27	1	4	3	7.0
7	Bench Work	8	7	1	0	0	—
8	Structural Work	322	297	25	39	40	8.3
9	Miscellaneous	89	75	14	41	36	2.2
KOTZEBUE	(Local Office 4600)	380	335	45	75	76	5.1
0-1	Professional, Technical Managerial	33	32	1	5	9	6.6
2	Clerical & Sales	62	58	4	11	12	5.6
3	Services	64	60	4	10	15	6.4
4	Farming, Forestry, Fishery	9	9	0	4	1	2.3
5	Processing	54	23	31	10	8	5.4
6	Machine Trades	7	7	0	1	1	7.0
7	Bench Work	5	4	1	1	1	5.0
8	Structural Work	101	97	4	31	25	3.3
9	Miscellaneous	45	45	0	2	4	22.5

TABLE V-4
APPLICANTS AND JOB OPENINGS BY OCCUPATIONAL 1/ CATEGORY BY EMPLOYMENT SERVICE OFFICE
October 1980 - September 1981
(Continued)

Primary Occupation Category	Occupation	Total Active Applicants	Experienced Applicants	Entry Level Applicants	Job Openings Received	Job Openings Filled	Ratio Active Applicants To Job Openings 2/
REGION IV	Bethel, Dillingham (Local Office 2700, 2800)	1,027	950	77	340	319	3.0
0-1	Professional, Technical Managerial	106	100	6	31	25	3.4
2	Clerical & Sales	178	161	17	102	99	1.7
3	Services	151	135	16	81	75	1.9
4	Farming, Forestry, Fishery	95	92	3	9	9	10.6
5	Processing	209	200	9	57	57	3.7
6	Machine Trades	29	27	2	8	7	3.6
7	Bench Work	4	4	0	0	0	—
8	Structural Work	147	141	6	15	15	9.8
9	Miscellaneous	108	90	18	37	32	2.9
BETHEL	(Local Office 2700)	653	601	52	119	112	5.5
0-1	Professional, Technical Managerial	42	38	4	11	7	3.8
2	Clerical & Sales	89	81	8	51	50	1.7
3	Services	84	75	9	28	28	3.0
4	Farming, Forestry, Fishery	58	56	2	0	0	—
5	Processing	183	176	7	15	15	12.2
6	Machine Trades	17	16	1	2	2	8.5
7	Bench Work	2	2	0	0	0	—
8	Structural Work	104	99	5	3	3	34.7
9	Miscellaneous	74	58	16	9	7	8.2
DILLINGHAM	(Local Office 2800)	374	349	25	221	207	1.7
0-1	Professional, Technical Managerial	64	62	2	20	18	3.2
2	Clerical & Sales	89	80	9	51	49	1.7
3	Services	67	60	7	53	47	1.3
4	Farming, Forestry, Fishery	37	36	1	9	9	4.1
5	Processing	26	24	2	42	42	0.6
6	Machine Trades	12	11	1	6	5	2.0
7	Bench Work	2	2	0	0	0	—
8	Structural Work	43	42	1	12	12	3.6
9	Miscellaneous	34	32	2	28	25	1.2
REGION V	(Local Office 2500, 2600 3300, 3400, 3500)	45,724	40,546	5,178	26,181	17,389	1.7
0-1	Professional, Technical Managerial	6,851	6,479	372	1,420	717	4.8
2	Clerical & Sales	12,929	11,461	1,468	7,417	4,061	1.7
3	Services	8,782	7,535	1,247	7,061	4,178	1.2
4	Farming, Forestry, Fishery	1,012	850	162	639	563	1.6
5	Processing	2,109	1,629	480	2,352	2,239	0.9
6	Machine Trades	2,034	1,908	126	577	329	3.5
7	Bench Work	365	346	19	181	91	2.0
8	Structural Work	6,748	6,358	390	2,816	2,240	2.4
9	Miscellaneous	4,894	3,980	914	3,718	2,971	1.3

TABLE V-4
APPLICANTS AND JOB OPENINGS BY OCCUPATIONAL 1/ CATEGORY
BY EMPLOYMENT SERVICE OFFICE
October 1980 - September 1981
(Continued)

Primary Occupation Category	Occupation	Total Active Applicants	Experienced Applicants	Entry Level Applicants	Job Openings Received	Job Openings Filled	Ratio Active Applicants To Job Openings 2/
MATSU	(Local Office 2500)	5,367	4,902	465	1,375	1,060	3.9
0-1	Professional, Technical Managerial	810	763	47	159	138	5.1
2	Clerical & Sales	1,351	1,234	117	267	217	5.1
3	Services	895	789	106	461	326	1.9
4	Farming, Forestry, Fishery	158	128	30	37	27	4.3
5	Processing	85	58	27	20	17	4.3
6	Machine Trades	282	267	15	43	29	6.6
7	Bench Work	37	36	1	6	3	6.2
8	Structural Work	1,286	1,200	86	263	217	4.9
9	Miscellaneous	463	427	36	119	86	3.9
GLENN-ALLEN	(Local Office 2600)	537	483	54	292	294	1.8
0-1	Professional, Technical Managerial	74	71	3	19	19	3.9
2	Clerical & Sales	128	108	20	40	40	3.2
3	Services	92	85	7	90	90	1.0
4	Farming, Forestry, Fishery	28	25	3	95	94	0.3
5	Processing	7	7	0	0	0	—
6	Machine Trades	37	30	7	10	10	3.7
7	Bench Work	3	3	0	0	0	—
8	Structural Work	113	101	12	20	22	5.7
9	Miscellaneous	55	53	2	18	19	3.1
SEWARD	(Local Office 3500)	828	763	65	1,043	965	0.8
0-1	Professional, Technical Managerial	68	64	4	33	23	2.1
2	Clerical & Sales	163	146	17	69	62	2.4
3	Services	204	189	15	250	209	0.8
4	Farming, Forestry, Fishery	48	43	5	4	4	12.0
5	Processing	80	75	5	556	545	0.1
6	Machine Trades	39	32	7	7	6	5.6
7	Bench Work	6	6	0	0	0	—
8	Structural Work	145	137	8	86	84	1.7
9	Miscellaneous	75	71	4	36	32	2.1
KENAI	(Local Office 3300)	4,505	3,812	693	1,714	1,286	2.6
0-1	Professional, Technical Managerial	487	462	25	71	45	6.9
2	Clerical & Sales	985	877	108	317	241	3.1
3	Services	750	657	93	592	443	1.3
4	Farming, Forestry, Fishery	101	91	10	11	10	9.2
5	Processing	562	215	347	403	355	1.4
6	Machine Trades	235	212	23	49	25	4.8
7	Bench Work	22	22	0	19	6	1.2
8	Structural Work	1,015	955	60	173	110	5.9
9	Miscellaneous	348	321	27	79	51	4.4

TABLE V-4
APPLICANTS AND JOB OPENINGS BY OCCUPATIONAL 1/ CATEGORY BY EMPLOYMENT SERVICE OFFICE
October 1980 - September 1981
(Continued)

Primary Occupation Category	Occupation	Total Active Applicants	Experienced Applicants	Entry Level Applicants	Job Openings Received	Job Openings Filled	Ratio Active Applicants To Job Openings 2/
KOCIAK	(Local Office 3400)	2,808	2,778	30	885	787	3.2
0-1	Professional, Technical Managerial	219	215	4	48	22	4.6
2	Clerical & Sales	556	553	3	257	236	2.2
3	Services	366	361	5	143	129	2.6
4	Farming, Forestry, Fishery	154	149	5	16	16	9.6
5	Processing	882	876	6	268	261	3.3
6	Machine Trades	78	78	0	19	11	4.1
7	Bench Work	6	6	0	2	2	3.0
8	Structural Work	247	244	3	15	13	16.5
9	Miscellaneous	300	296	4	117	97	2.6
ANCH-ORAGE	(Local Office 2400)	31,679	27,808	3,871	20,872	12,997	1.5
0-1	Professional, Technical Managerial	5,193	4,904	289	1,090	470	4.8
2	Clerical & Sales	9,746	8,543	1,203	6,467	3,265	1.5
3	Services	6,475	5,454	1,021	5,525	2,981	1.2
4	Farming, Forestry, Fishery	523	414	109	476	412	1.1
5	Processing	493	398	95	1,103	1,061	0.4
6	Machine Trades	1,363	1,289	74	449	248	3.0
7	Bench Work	291	273	18	154	80	1.9
8	Structural Work	3,942	3,721	221	2,259	1,794	1.7
9	Miscellaneous	3,653	2,812	841	3,349	2,686	1.1

Source: Alaska Department of Labor, Employment Security Automated Reporting System (ESARS), Table 96.

1/ Occupation Codes: 2 Digit Dictionary of Occupational Titles [4th Edition DOT].

2/ A ratio in excess of 1.0 indicates an excess of applicants over job openings [supply] and a ratio less than 1.0 indicates more openings than applicants [demand]. Some analysts believe a ratio of 2.0 is an accepted balance. Ratios say nothing about a qualitative match.

WAGE RATES FOR SELECTED OCCUPATIONS

Entry-level wages were collected for 173 selected occupations from a survey of 1,087 establishments throughout Alaska. Entry-level wage is defined as the gross dollar amount (before deductions) and excluded overtime pay unless the occupation usually required it. Tips, commissions, room and board, and bonuses may be additional benefits which are excluded. Sales representatives, sales clerks, waiters/waitresses, cooks, airplane pilots, real estate appraisers, and auto mechanics are some of the occupations in this survey which may receive significant compensation from these exclusions. Reported union wages also exclude fringe benefits. Nearly all the occupations require at least some formal or informal training.

Another source of wage data, titled *Laborer's & Mechanics' Minimum Rates of Pay* (effective April 15, 1981), can be obtained from the Wage & Hour Division of the Alaska Department of Labor. This pamphlet lists the minimum wage rates to be paid mechanics, laborers, and field surveyors employed on public contracts.

Data listed in Table V-6 shows the average wages from employers surveyed. If the occupational wage was union, it was listed separately as an average union wage. Though most of the data are presented as hourly rates, the number of hours worked per day may vary with the establishment. Those wages with a relatively low response (less than 3 firms) may be less representative of the actual prevailing wage for the occupations. Wage rates presented in the tables are unweighted averages. One firm's response carries an equal weight with regard to all other respondents even though the number of people employed in a given occupation varies from firm to firm.

TABLE V-5
ALASKA MINIMUM WAGE RATES 1/
January 1, 1981

Nonagricultural Workers:	$3.85/Hour
Agricultural Workers:	$3.85/Hour
Domestic Workers:	$3.85/Hour

1/ $0.50 higher than continental U.S.

TABLE V-6
WAGE RATES FOR SELECTED ENTRY LEVEL OCCUPATIONS IN ALASKA
June, 1981

OCCUPATIONS	NON-UNION Avg. $	NON-UNION No. of Firms	UNION Avg. $	UNION No. of Firms	State Govt. 1/
MANAGERS & OFFICERS					
Manager, Auto Parts	10.20	5			
Manager, Auto Service	12.32	3			
Manager, Fast Food Restaurant	6.48	5			
Manager, Merchandise	8.65	8	12.00	1	
Manager, Restaurant	11.59	7			
Wholesaler	11.12	4			
PROFESSIONAL & TECHNICAL					
Accountants & Auditors	11.10	31			10.84
Airplane Pilot	18.29	40			14.11
Appraiser, Real Estate (Commission)	34%	2			14.11
Architect	12.81	2			20.08
Buyer	10.06	3			
Caseworker	9.21	9			10.84
Chemical Engineer	19.52	1			
Civil Engineer	14.17	11			17.47
Commercial Artist	7.45	7			11.52
Computer Programmer	10.76	6			13.15
Dental Assistant	6.80	27			
Dental Hygienist	13.97	10			
Drafter	9.21	25	12.84	1	9.08
Electrical & Electronic Engineer	14.37	6	17.32	1	17.47
Electrical & Electronic Technician	11.27	13	17.57	9	13.16
Geologist	12.92	8			12.29
Group Recreation Worker	6.46	3			10.24
Industrial Engineer	12.00	1			
Law Clerk	10.34	10			11.52
Mechanical Engineer	11.38	6			20.08
Medical Laboratory Technologist	9.41	21			
Mining Engineer	22.00	1			18.72
Nurse, Licensed Practical	7.63	26			9.63
Nurse, Professional (R.N.)	9.14	35			11.52
Paralegal	8.46	7			15.12
Petroleum Engineer	17.34	6			
Pharmacist	13.61	13	15.85	2	
Physical Therapist	10.94	10			12.29
Purchasing Agent/Buyer	12.45	5			14.11
Radio Operator	5.75	2			
Reporters & Correspondents	7.58	10			
Respiratory Therapist	8.90	1			12.29
Surveyor	12.92	12			12.29
Systems Analyst, EDP	15.40	4			16.26
Travel Agent	5.60	9			
Vocational/Educational Counselor	7.87	4			
SERVICES					
Baker, Bread/Pastry	8.64	6	10.76	2	12.59
Bartender	6.98	40	8.25	22	11.85
Apprentice			5.94	2	
Butcher/Meat Cutter	12.12	12			
Apprentice	9.26	3	9.37	4	
Child Care Worker	4.61	17			
Cook, Institution	8.33	19	13.13	7	10.36
Cook, Restaurant	7.02	37	8.12	12	12.59
Cook, Short Order	5.48	33	7.58	4	9.20
Cosmetologist/Hair Stylist (Comm.)	53%	15			

TABLE V-6
WAGE RATES FOR SELECTED ENTRY LEVEL OCCUPATIONS IN ALASKA
June, 1981

	NON-UNION		UNION		State Govt. //
OCCUPATIONS	Avg. $	No. of Firms	Avg. $	No. of Firms	
Dining Room/Bartender/Cafeteria Attendant	4.20	4	4.46	2	7.90
Dishwasher	4.69	18	5.43	5	
Guards & Doorkeepers	8.39	16	6.10	2	
Guide, Sightseeing or Establishment	8.33	4			
Housekeeper	6.92	2			8.60
Janitors, Porters & Cleaners	7.04	39	10.00	8	9.20
Kitchen Helper	5.71	8			7.90
Maid	5.78	37	6.41	8	
Nurse Aide/Orderly	6.84	20			8.12
Waiter/Waitress	4.41	66	4.67	18	9.67
MAINTENANCE & PRODUCTION					
Able Seaman	100/day	1	70.56/day	1	12.89 *
Asbestos & Insulation Workers	14.26	7	28.62	1	
Apprentice/Trainee	8.53	5			
Bagger	4.05	13	4.23	8	
Blaster Mining/Quarrying	11.36	1			
Body Repairer, Auto	13.03	6	12.45	1	
Apprentice			6.79	1	
Boilermaker			20.97	2	
Bricklayer			18.93	1	
Bus Driver	6.00	1	5.12	1	
Cannery Worker	5.38	13	5.63	7	
Carpenter	14.03	17	18.51	21	12.27
Apprentice	10.03	3	8.01	1	
Carpenter Helper	7.00	3			
Cement Mason	12.83	3	17.13	2	
Chain Offbearer, Lumber	12.13	2			
Chaser	12.04	5	11.94	1	
Choker Setter, Lumber	10.99	8			
Cleaner, Vehicle	5.24	11			
Crane, Derrick, & Hoist Operators	15.86	6	18.15	5	
Delivery/Route Worker	7.98	38	13.03	8	
Electrician	17.70	14	21.31	19	
Apprentice	12.18	1	12.56	3	
Faller/Bucker	4.28	6	1.82	1	
Fish Cleaner/Butcher	5.31	8	5.62	9	
Gas & Electric Appliance Repairer	10.88	2			
Glazier	8.58	6	19.33	4	
Apprentice	12.25	1	15.51	3	
Heavy Equipment Operator	15.35	27	18.34	24	12.27
Hooktender	14.11	6	14.87	1	
Industrial Truck Operator	9.05	6	11.09	15	
Laborers & Unskilled Workers	9.52	23	13.56	13	9.77
Laundry Presser, Machine	6.14	5	5.94	1	
Line Installer-Repairer	14.41	5	19.45	17	
Apprentice	13.91	1	12.10	3	
Line Service Attendant	9.35	5	8.41	2	
Machinist	10.24	7	13.21	4	
Apprentice	7.00	1			
Machinist, Wood	7.50	1	13.54	1	
Maintenance Repairer, Gen. Util.	9.38	37	13.48	11	12.29
Mechanic, Aircraft	11.61	31	11.60	2	13.08
Mechanic, Auto	12.31	50	14.81	10	12.27
Apprentice	7.75	2	6.79	1	
Mechanic, Diesel	14.48	18	17.48	11	12.27
Apprentice			6.79	1	
Mechanic, Engineering Equipment	16.23	8	17.22	7	13.08
Mechanic, Marine	8.79	3			12.29
Millwright	13.63	2	17.35	1	
Offset Lithographic Press Opr.	11.53	11	14.90	2	10.84
Apprentice	5.50	3			

TABLE V-6
WAGE RATES FOR SELECTED ENTRY LEVEL OCCUPATIONS IN ALASKA
June, 1981

OCCUPATIONS	NON-UNION		UNION		State Govt. //
	Avg. $	No. of Firms	Avg. $	No. of Firms	
MAINTENANCE & PRODUCTION (Cont.)					
Oil Pumper	16.16	1			
Oiler	13.96	4	17.31	4	13.01
Optician, Dispnsg./Optical Mech.	8.43	5			
Apprentice	4.72	4			
Order Filler	6.25	4			
Ordinary Seaman	95.47/day	9	63.72/day	1	11.97 *
Painter, Automotive	9.07	3			
Apprentice	6.79	1			
Painter, Maintenance	15.00	1	18.65	2	12.27
Pasteup Worker	6.38	4	15.45	1	
Apprentice	6.50	1	9.27	1	
Plumber/Pipefitter	16.50	6	20.73	12	
Apprentice	6.50	2	11.26	1	
Helper	6.00	2			
Pond Worker, Lumber	11.12	2	12.02	1	
Presser, Hand	5.77	2	5.77	1	
Presser, Machine	5.50	2	5.70	1	
Production Packager	8.44	10	7.92	11	
Apprentice	7.39	1			
Rigger Slinger	12.65	6	13.03	1	
Roofer	17.05	4	18.82	5	
Apprentice			12.26	2	
Helper	10.00	2	13.09	1	
Rotary Drill Operator	17.23	7	18.30	1	
Apprentice	8.00	1			
Helper	10.00	2			
Roustabout	15.66	6			
Service Station Attendant	4.73	40			
Sheet Metal Worker			20.93	5	
Apprentice			17.00	1	
Shipping Packer	12.13	2			
Stock Clerk, Sales Floor	5.36	36	6.14	11	
Structural Steel Worker	13.86	8	16.93	8	
Supervisor, Nonworking	11.52	3			10.94
Surveyor Helpers					
Instrument Person	11.44	13	16.05	4	12.27
Head Chairperson	10.57	16	15.50	4	10.94
Rear Chairperson	9.80	14	15.08	4	
Taxi Driver (Commission)	48%	3			
Tester	7.47	4	6.00	1	
Tire Fabricator/Repairer	6.83	5			
Truck Driver	12.09	37	15.80	33	11.60
Welder/Flamecutter	13.77	13	17.46	8	
Apprentice	7.00	2			
Yarder Engineer	12.81	6	14.01	1	
CLERICAL					
Accounting Clerk	7.21	54	6.67	4	8.58
Bookkeeper, Hand	7.65	68	8.71	2	
Bookkeeping/Billing Machine Oper.	7.15	3			
Cashier	5.39	74	6.79	13	11.79 *
Claim Adjuster	11.55	2			
Clerical Supervisor	9.09	13	7.29	1	9.08
Collector	6.55	3			
Computer Operator	7.33	9			
Counter Clerk	5.18	4			
Credit Authorizer	5.00	1			
Credit Clerk	5.45	6	5.02	1	
Desk Clerk	5.48	17	6.69	4	
Dispatcher, Airplane	7.52	12			
Dispatcher, Vehicle, Svc. or Work	9.02	10	18.21	5	
File Clerk	4.40	2			
General Clerk, Office	6.53	79	9.33	7	8.58
Insurance Clerk, Medical	6.96	3			

TABLE V-6
WAGE RATES FOR SELECTED ENTRY LEVEL OCCUPATIONS IN ALASKA
June, 1981

	NON-UNION		UNION		State Govt. 1/
OCCUPATIONS	Avg. $	No. of Firms	Avg. $	No. of Firms	
CLERICAL (Cont.)					
Keypunch Operator	6.59	3			8.12
Marking Clerk	5.50	2			
Messenger	5.11	7			
Meter Reader, Utilities			16.74	1	
Payroll/Timekeeping Clerk	9.57	8			
Perpheral EDP Equipment Operator	7.80	6			10.84
Receptionist	6.40	38			
Secretary	7.24	64			9.63
Secretary, Legal	7.71	19			9.63
Secretary, Medical	7.31	11			
Shipping & Receiving Clerk	6.32	13	13.55	4	
Stock Clerk, Stockroom or Warehouse	7.17	48	12.26	13	9.77
Switchboard Operator	6.09	14			8.35
Teller	5.63	41			
Ticket Agent	6.21	13	9.52	5	
Transportation Agent	8.28	2	10.96	5	
Typist	6.21	34	9.43	3	7.69
SALES					
Sales Clerk	5.27	76	6.14	7	
Sales Representative-Technical	10.88	6			
Sales Representative-Nontechnical	7.73	19	8.66	1	
Traffic Agent			4.92	1	

1/ The wages presented for the Alaska State Government employees are from the State's basic salary schedule and include the Juneau, Anchorage, and Ketchikan areas. State workers employed in other geographic locations receive varying pay step diffentials. For example, Nome State employees who are a range 16 [step A] will receive approximately 33 percent more pay than a range 16 [step A] in Anchorage.

* Current wage for State of Alaska Marine Highway System Employees.

Source: Alaska Department of Labor, Research & Analysis, Annual Wage Rate Survey.

CHAPTER VI
UNEMPLOYMENT INSURANCE CLAIMANT CHARACTERISTICS

Once every month, a survey of Unemployment Insurance (UI) claimants is conducted to obtain certain characteristics data (ES 203 Report). A 100 percent sample of claims is drawn from the Automated Benefit System on the departments' computer. All claimants filing for a week of benefits during the week containing the 19th day of the month (reflecting unemployment for the previous week) are included. Claimant characteristics include industry of last employment, primary occupation, duration of unemployment, age, and sex.

The coding of UI claimant industry characteristics differs from the industry coding used to classify industry employment. Employment data have a separate industry code for all government employment while claimant characteristics data do not. For example, a ferry worker employed with the State of Alaska Department of Marine Transportation would be included under State government employment. If this person filed for UI benefits they would appear under the industry classification of water transportation. Another example involves persons employed in local school districts. These persons are included in the employment count of local government; if they become UI claimants, they would be classified in the service industry.

Claimant data was drawn for the week of August 15-23, 1981. There were 6,841 claimants. Graphs illustrate the industrial and occupational distribution of the claimants. The largest group of claimants were formerly employed in the services industry (35.7 percent), followed by construction (14.1 percent) and trade (14.0 percent). The occupational distribution indicates 64.3 percent of the claimants were fairly evenly distributed between structural work (21.9 percent), clerical and sales (21.4 percent) and professional, technical and managerial occupations (21.0 percent).

Research and Analysis prepared a table producing program to extract cross-tabulated data. The table presents an overview of the number of claimants by local office, cross-tabulated by primary occupation code and industry of last employment. Occupation codes are from the Dictionary of Occupation Titles (two digit) and industry codes are from the Standard Industry Classification Manual (two digit).

UI claimant data is a potential source of labor supply information. Occupational summaries indicate a pool of available and experienced workers not currently employed. Insured, or experienced unemployed persons comprised up to two thirds of estimated unemployed during the first nine months of 1981. Excluded from the count of experienced unemployed are new entrants and reentrants to the labor force.

The following table contains a representative sample of UI claimants by frequently occurring occupational titles and major industry groups. Claimants are also shown by the local office area in which they filed for UI benefits. Due to space limitations only a fraction of all occupations are detailed (those most prominent). See footnote at the end of the table for limitations. (This data is available each month at Research and Analysis upon request).

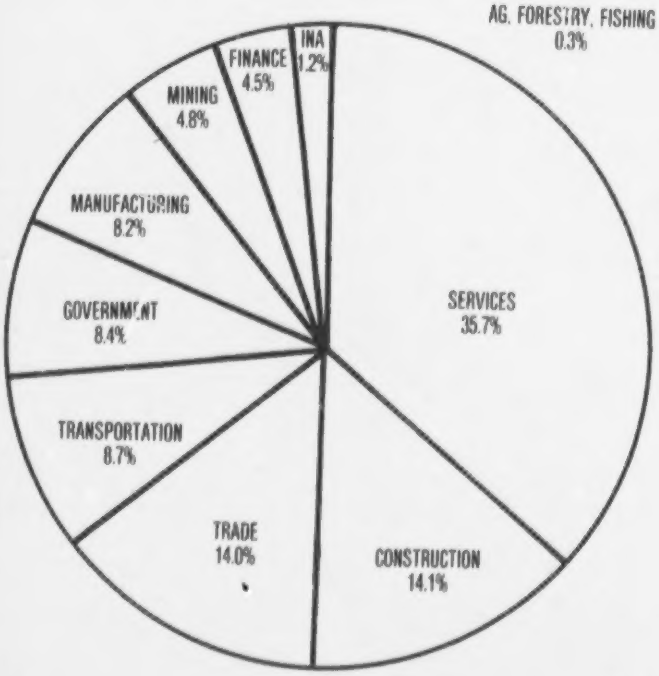
Construction trades were the most prevalent occupations of UI claimants in seven local offices: Juneau, Sitka, Matsu, Kenai, Seward, Fairbanks, and central office mail. Food and beverage preparation was the primary occupation for Anchorage claimants. Food processing was first in Kodiak, and packaging and materials handling occurred most often in Ketchikan.

The major industry attachment of claimants in Anchorage, Matsu, Kenai and central office mail was the services industry. Public administration was dominant in Juneau; manufacturing in Kodiak; construction in Fairbanks; and transportation in Ketchikan and Seward.

The industrial composition of UI claimant data reflects to some extent the major economic activities in Alaska. Some local area activities can also be elicited, such as public administration in Juneau, and fish processing in Kodiak. However, data presented in the following tables are indicative of only one point in time (August) and do not reflect the seasonal cycle of Alaska's economy. For instance, construction, manufacturing and trade are all reaching peak activity in August and the number of claimants or percent distribution would not be as great as might occur in December or January.

GRAPH V-1

ALASKA UI CLAIMANTS
INDUSTRIAL DISTRIBUTION
AUGUST 1981



GRAPH VI-2

ALASKA UI CLAIMANTS
OCCUPATIONAL DISTRIBUTION
AUGUST 1981

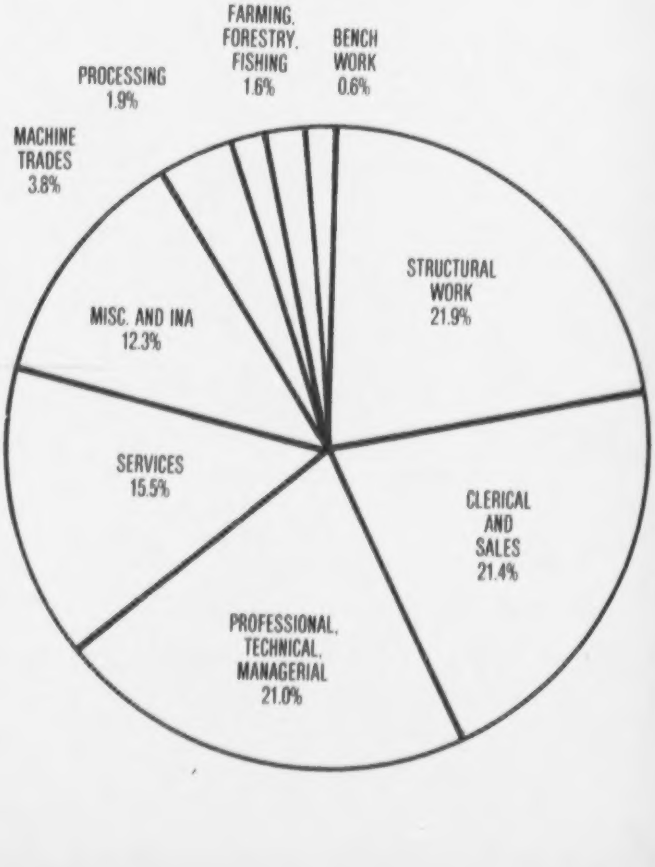


TABLE VI-1
NUMBER OF UNEMPLOYMENT INSURANCE CLAIMANTS / BY INDUSTRY AND OCCUPATION AND BY LOCAL OFFICE AREA
August 1981

	Mining	Const.	Mfg.	Trans.	Trade	Finance	Services	Pub. Admin.	Total	All Claimants
Occupation				STATE						6,845
Education	0	3	3	3	1	10	236	13	269	
Misc., Professional, Technical	2	1	1	3	5	10	60	28	110	
Stenography, Typing, Filing	13	5	8	23	42	37	191	46	365	
Computing & Acct. Recording	3	0	2	2	67	28	27	2	131	
Food & Beverage Preparation	9	17	11	12	96	4	207	9	365	
Mechanics & Machinery Repairers	9	18	10	19	25	0	16	15	112	
Excavating, Grading & Paving	20	119	28	21	10	1	25	14	238	
Construction	96	348	81	25	41	11	127	58	787	
Transportation	0	29	4	112	11	0	97	3	256	
TOTAL	152	540	148	220	298	101	986	188	2,633	
				JUNEAU						296
Life Sciences	0	0	0	0	0	1	6	5	12	
Administrative Specialties	0	0	0	0	0	4	4	18	26	
Stenography, Typing, Filing	0	0	0	0	1	2	4	7	14	
Construction	2	11	1	0	2	2	6	5	29	
TOTAL	2	11	1	0	3	9	20	35	81	
				SITKA						94
Stenography, Typing, Filing	0	0	0	1	0	0	6	0	7	
Construction	0	9	1	1	0	0	0	1	12	
TOTAL	0	9	1	2	0	0	6	1	19	
				KETCHIKAN						241
Construction	0	15	7	0	2	1	3	1	29	
Transportation	0	0	0	19	0	0	1	1	21	
Packaging & Materials Handling	0	3	19	11	3	1	3	1	41	
TOTAL	0	18	26	30	5	2	7	3	91	
				ANCHORAGE						2,456
Stenography, Typing, Filing	2	1	3	6	20	9	32	12	87	
Computing & Acct. Recording	2	0	1	0	31	16	10	1	61	
Food & Beverage Preparation	2	5	2	5	49	1	64	0	128	
Building & Related Services	0	1	3	1	6	1	50	4	66	
Construction	1	40	1	0	1	0	6	2	51	
Transportation	0	16	3	33	6	0	62	1	121	
TOTAL	7	63	13	47	113	27	224	20	514	
				MAT-SU						554
Education	0	0	1	0	1	0	21	1	24	
Stenography, Typing, Filing	2	0	2	5	4	7	34	5	59	
Mechanics & Machinery Repairers	4	4	0	8	2	0	0	2	20	
Excavating, Grading & Paving	2	17	0	3	0	0	0	1	23	
Construction	19	25	6	3	3	0	5	4	65	
Transportation	0	2	0	30	1	0	10	0	43	
TOTAL	27	48	9	49	11	7	70	13	234	
				KENAI						393
Stenography, Typing, Filing	1	0	1	0	3	4	6	3	18	
Computing & Acct. Recording	1	0	0	0	5	0	7	0	13	
Food & Beverage Preparation	0	0	0	0	3	0	11	0	14	
Welders, Cutters & Related	1	4	2	0	1	0	1	1	10	
Excavating, Grading, & Paving	0	6	1	0	1	0	2	1	11	
Construction	25	28	4	1	6	0	12	0	76	
Transportation	0	0	0	14	1	0	9	0	24	
TOTAL	28	38	8	15	20	4	48	5	166	

Number of Unemployment Insurance Claimants 1/ by Industry and Occupation and by Local Office Area August 1981

Occupation	Mining	Const.	Mfg.	Trans.	Trade	Finance	Services	Pub. Admin	Total	All Claimants
KODIAK										51
Food Processing	0	0	7	0	0	0	0	0	7	
Construction	0	5	0	0	0	0	1	0	6	
TOTAL	0	5	7	0	0	0	1	0	13	
SEWARD										77
Food Processing	0	0	4	0	0	0	1	0	5	
Construction	2	1	2	0	1	0	3	0	9	
Packaging & Materials Handling	0	1	0	7	0	0	1	0	9	
TOTAL	2	2	6	7	1	0	5	0	23	
FAIRBANKS										1,030
Stenography, Typing, Filing	1	1	0	1	2	2	27	2	36	
Computing & Acct. Recording	0	2	0	3	7	0	20	0	32	
Food & Beverage Preparation	1	3	0	0	6	1	8	1	20	
Building & Related Services	0	2	0	1	0	0	16	1	20	
Electrical Assembly, Installing, Repairing	1	17	2	1	0	0	11	0	32	
Excavating, Grading, Paving	4	12	1	2	1	0	5	2	27	
Construction	6	92	20	6	3	0	24	10	161	
Transportation	0	7	0	20	0	0	6	1	34	
TOTAL	13	136	23	34	19	3	117	17	362	
MAIL CLAIMS 2/										1,713
Education	0	3	3	3	0	10	217	10	246	
Misc. Professional, Technical	1	1	1	1	3	5	31	16	59	
Food & Beverage Preparation	3	7	4	4	6	2	86	4	116	
Forestry	0	2	46	1	0	0	1	1	51	
Construction	18	100	33	12	15	7	46	35	266	
TOTAL	22	113	87	21	24	24	381	66	738	

Source: Alaska Department of Labor, Cross Tabulation of Characteristics of Insured Unemployed (August 1981, ES-203).

1/ Number of claimants and occupations listed in this table is a representative sample - only those claimants in specific occupations above a minimum number are shown, based on the following formula:

Statewide: 100 or more claimants in each occupation.
Juneau: 10
Sitka: 5
Ketchikan: 10
Anchorage: 50
Mat-Su: 20
Kenai: 10
Kodiak: 5
Seward: 5
Fairbanks: 20
Mail: 50

Complete data is available at Research and Analysis.

2/ Mail: Represents those rural claimants who do not live within local office jurisdiction.

CHAPTER VII COST OF LIVING MEASURES

INTRODUCTION

This section summarizes several cost of living measures which are frequently requested. Because there are several different measures, the user of these types of data needs to carefully evaluate different available measures to determine which is most useful for a particular application. Outlined in Table VII-1 is a description of the various measures discussed in detail.

CONSUMER PRICE INDEX

The consumer price index (CPI) is a commonly misunderstood economic statistic despite frequent reports in the media. Following is a brief explanation of how the CPI is used, how it is computed, what it does and does not measure, and how to use it. Criticisms of CPI methodology and use are also considered. The U.S. Department of Labor, Bureau of Labor Statistics (BLS) produces a CPI for the United States and for selected urban areas. There are no CPI's for an entire state. In Alaska, a CPI is currently produced in alternating months for Anchorage and Fairbanks.

TABLE VII-1
COST OF LIVING MEASURES

	CONSUMER PRICE INDEX (CPI)	URBAN FAMILY BUDGET	COST OF FOOD AT HOME	FEDERAL GOVERNMENT COST OF LIVING ADJUSTMENT
Description	Measures Rate of Change in Price of a Fixed Market Basket of Goods Relative to a Base Year of 1967	Budgets by Expenditure, Low, Intermediate and Higher Living Level	Cost of Food, Wood, Fuel, Electricity for Various Family Groups for a Week	Price Survey of Cost of Living Differentials for Federal Government Workers
Responsible Agency	U.S. Dept. of Labor Bureau of Labor Statistics	U.S. Dept. of Labor Bureau of Labor Statistics	University of Alaska Cooperative Extension Service	U.S. Office of Personnel Management
Source of Data	Bureau of Census Monthly Survey of Prices	Bureau of Census Price Survey and Consumer Price Index	Price Survey	Price Survey
Time Period	Bimonthly (AK) Monthly (US)	Annual	Quarterly	Annual
Industry Detail	None	None	None	None
Geographic Detail	Anchorage Fairbanks U.S.	Anchorage and Selected U.S. Urban Areas	Selected Alaskan Communities, State and U.S.	Anchorage, Fairbanks Juneau, Balance of State and Washington, D.C.
Published in:	BLS News Releases	BLS New Releases	Cooperative Extension Service Newsletter	Office of Personnel Management Newsletter

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USES

The CPI has three major uses. It measures the change in prices over time of a constant *market basket* of goods. This measure is an important economic statistic, and is crucial in evaluating government policy and private investment decisions. To convert the CPI from the actual index number to a percentage, use the following procedure:

INDEX POINT CHANGE

CPI	250.5
Less previous index	230.9
Equals index point change	19.6

Percentage change

Index point difference	19.6
Divided by previous index	230.9
Equals change	0.0849
Multiplied by 100	0.085 x 100
Equals percentage change	8.5%

This example illustrates that market basket prices for *all urban consumers* in Anchorage increased 8.5 percent between September 1980 and 1981.

The CPI is also used as a deflator of other dollar-denominated economic indices. Time series data in "real," or inflation-free dollars are produced in this manner. To adjust (discount) dollars for the effect of inflation from any given year, use the following procedure:

CPI for past time	230.9
Divided by CPI for current time	250.5
Equals	0.092176
Multiplied by current dollars	x $1,000.00
Equals past dollars	$921.76

The above example illustrates that $1,000.00 dollars in Anchorage in September 1980 would be the equivalent of $921.76 in September 1981.

A third use of the CPI is to escalate income and transfer payments. Many union contracts, government entitlement programs such as social security and food stamps, and private contractual agreements such as leases and child support contain escalation clauses based on the CPI. In 1978, BLS estimated that a one percent increase in the national CPI resulted in a $1 billion increase in national income payments.

Although the CPI is frequently reported in the media as the *inflation rate* or *cost-of-living* increase, this is technically not correct. The CPI is based on a constant market basket of goods which is revised about once every five years. For this reason, it is prices which are measured, not the cost-of-living. To measure the actual cost-of-living, the market basket would have to be revised more frequently, to account for changing consumption patterns. It would also have to take into account living costs such as income taxes, which are not a component of the CPI market basket.

METHODOLOGY

The CPI market basket includes all types of expenditures that typical consumers make, from medical services and fuel to food to entertainment. Each month, Bureau of Census employees check actual prices in all surveyed urban areas. Survey results are given to BLS and the CPI is computed by assigning weights to each good, depending on the importance of the good in the average consumer's expenditures. An index is available for individual components as well as a total for all items.

There are two sets of weightings, one for *all urban consumers*, and the other for *wage and clerical* workers which result in two CPI's for each urban area. The *all urban consumer* CPI approximates the buying habits of 80 percent of the noninstitutional civilian population. The *wage and clerical* CPI approximates the buying habits of 40 percent of noninstitutionalized civilian population. The *all urban consumers* CPI was begun in 1978. Previously only the *wage and clerical* CPI was available.

The form the CPI takes is a number rounded to one decimal place comparing the current cost of the market basket to the cost in an arbitrary base year. The base year currently being used is 1967. The CPI will be rebased to 1977 next year.

IMPACT OF HOUSING ON CPI

The CPI has generated controversy in the past several years. Primary criticism of the BLS methodology used to generate the CPI is that it overstates the impact of mortgage costs. This argument states that only a small percentage of U.S. consumers buy real estate in any given month, and yet the recent increases in mortgage prices are treated as if they had the same effect as increases in short-term consumption items such as food or gasoline. This *artificial* increase in the CPI is then magnified by escalator clauses in contracts and income payments. This in turn stimulates further CPI increases, according to economists critical of the CPI. In short, these critics see the CPI, a statistic, as an actual contributor to inflation. Many would like to see another measure, such as the U.S. Department of Commerce gross national product deflator index substituted for the CPI in contracts and income payments. The countering point of view is that the CPI simply measures prices, and that any consumer shopping for real estate is in fact faced with sharply

TABLE VII-2
FAIRBANKS CPI
FEBRUARY 1979 TO PRESENT

		Wage and Clerical	All Urban Consumers
1979	February	100.0	100.0
	April	101.6	101.4
	June	103.7	103.9
	August	105.5	105.2
	October	108.1	108.2
	December	107.9	107.9
1980	February	110.4	110.2
	April	112.8	112.7
	June	113.5	113.4
	August	115.1	115.0
	October	117.6	117.4
	December	119.6	119.3
1981	February	121.8	121.5
	April	123.6	123.2
	June	124.9	124.3
	August	125.7	125.3

TABLE VII-3
ANCHORAGE CPI
JANUARY 1969 TO PRESENT

		Wage and Clerical	All Urban Consumers 1/
1969	January	103.7	
	April	105.3	
	July	105.6	
	October	107.3	
1970	January	107.9	
	April	108.2	
	July	109.6	
	October	111.5	
1971	January	111.6	
	April	111.7	
	July	113.0	
	October	114.4	
1972	January	114.2	
	April	115.8	
	July	115.9	
	October	116.9	
1973	January	116.4	
	April	119.4	
	July	120.4	
	October	123.8	
1974	January	125.6	
	April	129.8	
	July	134.0	
	October	140.0	
1975	January	142.9	
	April	150.0	
	July	153.8	
	October	157.4	
1976	January	158.8	
	April	161.7	
	July	164.9	
	October	167.6	
1977	January	172.6	
	April	177.4	
	July	177.3	
	October	179.2	
1978	January	179.2	
	March	180.8	180.7
	May	184.0	184.2
	July	188.6	188.5
	September	192.8	193.2
	November	194.8	194.7
1979	January	197.3	198.1
	March	200.5	201.0
	May	202.5	203.5
	July	206.4	207.4
	September	210.9	213.2
	November	211.8	213.7
1980	January	215.9	218.2
	March	220.2	223.5
	May	223.1	226.5
	July	224.8	228.4
	September	226.7	230.9
	November	232.0	236.5
1981	January	235.0	240.1
	March	236.2	241.1
	May	240.1	244.6
	July	241.7	246.1
	September	245.9	250.5

1/ *Series began March 1978.*

increased mortgage prices. Heavy weighting of the CPI toward housing simply reflects the fact that for most consumers a house is by far the largest purchase they will make, should they be able to buy a house at all. NOTE: The Bureau of Labor Statistics announced plans to change the housing component of the CPI. Mortgage prices will be dropped, and rental equivalency prices will be substituted. Expected dates of implementation are January 1983 for the *all urban consumer* index and January 1985 for the *wage and clerical worker* index.

COMPARISON OF ANCHORAGE TO UNITED STATES

Anchorage's consumer price index rose less rapidly than the national consumer price index from October 1967 through October 1973. Beginning in 1974, this trend reversed. High energy costs resulting from the OPEC oil price increase, combined with pipeline construction led to rapid CPI increases. Price increases slowed once the pipeline workforce and related economic expansion was in place. For two years, increases in the Anchorage CPI outpaced increases in the national CPI. During peak pipeline years of 1976 and 1977, Anchorage prices increased at roughly the national rate. A new trend began in the post pipeline period with price increases lower in Anchorage than in the rest of the nation. Cause of Anchorage's diminished price increases in 1979 and 1980 was clearly completion of the pipeline with the resultant decrease in population and consumer spending. As record vacancy rates occurred in Anchorage and Fairbanks, declining housing prices particularly slowed the rise of the index. Stiffer price competition was also occurring among the large number of trade and service firms which had opened during the pipeline boom. Another factor moderating price increases was the introduction of state subsidized housing loans. Although this program tended to increase the demand for and cost of housing, (mortgage cost for housing is a large part of CPI) the subsidized rates helped keep the Anchorage CPI from rising as much as it would if national mortgage interest rates were in effect.

TABLE VII-4
YEARLY CPI AND PERCENTAGE CHANGE
WAGE AND CLERICAL WORKERS ONLY

		United States		**Seattle**		**Anchorage**		**Fairbanks**	
		CPI	% Change	CPI	% Change	CPI	% Change	CPI	% Change
OCTOBER	1967	100		100		100			
	1968	105.7	5.7	106.0 1/	6.0	102.6	2.6		
	1969	111.6	5.3	110.6 1/	4.2	107.3	4.4		
	1970	118.1	5.5	114.9 1/	3.7	111.5	3.8		
	1971	122.6	3.7	117.6 1/	2.3	114.4	2.5		
	1972	126.6	3.2	121.2 1/	3.0	116.9	2.1		
	1973	136.6	7.3	131.4 1/	7.8	123.8	5.6		
	1974	153.0	10.7	147.9 1/	11.2	140.0	11.6		
	1975	164.6	7.6	159.7 1/	7.4	157.4	11.1		
	1976	173.3	5.0	167.9 1/	4.9	167.6	6.1		
	1977	184.5	6.0	182.5 1/	8.0	177.3	5.5		
NOVEMBER	1978	201.8	8.6	202.1	9.7	194.8	9.0		
	1979	227.6	11.3	221.5	8.8	211.8	8.0	107.9 2/	
	1980	256.4	11.2	259.4	14.6	232.0	8.7	119.62 2/	9.8

1/ CPI is for November rather than October of years listed.

2/ CPI is for December rather than November of years listed.

URBAN FAMILY BUDGET

While the rate of change of the Consumer Price Index for Anchorage or Fairbanks can be compared to the rate of change of CPI's in other areas, actual price comparisons are not possible based on CPI data. Other data available do allow interarea cost comparisons. Once a year, U.S. Department of Labor, Bureau of Labor Statistics produces *Urban Family Budgets and Comparitive Indexes for Selected Urban Areas*, which provide a comparison of costs for Anchorage and 28 other areas outside Alaska. It contains estimated income required to support low, medium and high budget standards of living for a hypothetical family of four. Budgets do not represent how families actually spend their money, nor are they intended to represent a minimum level of adequate income. The budgets are only intended to reflect assumptions made about the manner of living at each of three hypothetical levels. Sixteen cost categories are provided. The publication is available from the Alaska Department of Labor, Research and Analysis. The most recent available period is Autumn, 1980. Listed below is a selection from the Urban Family Budget for Autumn 1980.

TABLE VII-5

ANNUAL TOTAL BUDGET FOR A 4-PERSON FAMILY, AUTUMN 1980 1/

Budget Level	Urban U.S.	Anchorage	Seattle-Everett
Lower	$14,044	$20,987	$15,684
Intermediate	$23,134	$29,682	$23,392
Higher	$34,409	$42,125	$33,524

1/ Source of data, methods of calculations and quantities of goods and services for each budget level are described in detail on BLS Bulletin 1570-5.

PRICE COMPARISONS IN ALASKA COMMUNITIES

Comparing prices in Alaska communities is difficult. Many goods and services available in larger cities are unavailable at any price in rural areas. The consumption habits of urban Alaskans vary greatly from their rural counterparts. This results in different *market baskets* and difficult comparison of *living costs.* Subsistence contribution in rural areas further complicates any accurate appraisal of what it costs to support a comparable life style in urban and rural areas.

While no consumer price index is computed for rural Alaska areas, the University of Alaska, Cooperative Extension Service conducts a quarterly survey of selected Alaskan communities to determine the weekly cost of food, lumber, electricity and diesel fuel for various family groups. A summary of the most recent survey is presented in Table VII-7. This data is available quarterly upon request to the University of Alaska, Cooperative Extension Service. Cost of food is available for individuals' consumption by age and sex to allow composition of various family types. Quarterly and year ago comparisons can be made with previous survey costs.

Prices in Anchorage may not always rise as rapidly as they do in the rest of the nation but according to the *Urban Family Budget* it still costs more to live in Anchorage than in any other major urban area. However, the difference between Anchorage prices and U.S. average prices has narrowed slightly since 1969. In 1980 the Anchorage lower budget was nearly 50 percent greater than the national average compared to 56 percent greater in 1979. Intermediate and higher budgets in Anchorage in 1980 were 28 and 22 percent higher than the national average compared to 36 and 35 percent in 1979. This trend is attributed to increasing Alaska population, improved transportation facilities and increased commercial competition. Table VII-6 gives a breakout of selected low budget expenditures relative to the national average.

TABLE VII-6
LOWER BUDGET FOR A FAMILY OF FOUR
AUTUMN 1980 1/

	ANCHORAGE		UNITED STATES		Cost Index
	Dollar	Percent	Dollars	Percent	(U.S. Average = 100)
TOTAL BUDGET	$20,987	100%	$14,044	100%	149
Family Consumption	16,378	78	11,243	80	146
Food	5,268	25	4,321	31	122
Housing	4,926	23	2,608	19	189
Transportation	1,999	10	1,160	8	172
Clothing	1,072	5	907	6	118
Personal Care	433	2	352	3	123
Medical Care	2,087	10	1,298	9	161
Other Consumption	593	3	597	4	99
Other Items	737	4	583	4	126
Social Security/Disability	1,367	7	881	6	155
Personal Income Taxes	2,505	12	1,337	10	187

1/ *Source: Autumn 1980 Urban Family Budget U.S. Department of Labor, Bureau of Labor Statistics.*

TABLE VII-7
COSTS OF SELECTED ITEMS IN
SELECTED ALASKA COMMUNITIES, JUNE 1981

COMMUNITY	FOOD AT HOME FOR A WEEK	RATIO OF FOOD COST TO ANCHORAGE	RATIO OF FOOD COST TO U.S. AVERAGE	ELECTRICITY (1,000 kwh)	HEATING OIL (55 Gal.)	AUTO GASOLINE (55 Gal.)	LUMBER 2x4x8
U.S. Average	$72.00	0.86	1.00	—	—	—	—
Anchorage	84.08	1.00	1.17	$39.85	$71.50	—	$2.00
Barrow	180.32	2.14	2.50	51.35	115.50	$115.50	—
Cordova	133.04	1.58	1.85	180.00	83.60	86.35	2.83
Delta	111.74	1.33	1.55	99.64	68.64	85.64	2.35
Fairbanks	92.98	1.11	1.29	85.82	66.92	85.80	1.80
Juneau	93.45	1.11	1.30	39.96	68.38	80.57	2.43
Kotzebue	153.79	1.83	2.14			86.90	—
Petersburg	95.08	1.13	1.32	91.00	72.25	83.05	2.29
Sitka	83.29	0.99	1.16	—	—	—	—
Tok	124.05	1.48	1.72	194.70	64.50	89.43	2.24
Unalaska	167.60	1.99	2.33	—	96.25	95.42	4.00
Valdez	102.89	1.22	1.43	108.00	67.10	84.15	2.89

* Cost of foods which would provide minimum nutrition under U.S. government standards, for a family of four with elementary school children.

Source: University of Alaska, Cooperative Extension Service and U.S. Department of Agriculture, "Cost of Food at Home For a Week," June 1981

FEDERAL GOVERNMENT COST OF LIVING ADJUSTMENT (COLA)

The Federal Office of Personnel Management surveys prices in Anchorage, Fairbanks and Juneau to determine federal government cost of living pay adjustments for these Alaska cities. Comparisons to Washington, D.C. prices are made. In 1980 COLA's were 22.5 percent for Anchorage and Juneau, and 25 percent for the balance of the state. In 1981, COLA's are 17.5 percent for Anchorage, and 25 percent for the rest of the state. Data on actual survey prices used to arrive at the COLA's are published by the Office of Personnel Management and are available from Research and Analysis. These data have been criticized as incorrect comparisons between Alaska and Washington, D.C. The allowance rate is not based solely upon living costs but is also based upon the extent to which costs and prices in Alaska exceed those in Washington, D.C. Use of this data is limited.

CHAPTER VIII INCOME MEASURES

INTRODUCTION

This section discusses several measures of income. Because the measures have different strengths and weaknesses, the user should carefully evaluate available measures to determine which is most useful for a particular application. Table VIII-1 summarizes the various measures available from the Department of Labor.

NONAGRICULTURAL WAGE AND SALARY EARNINGS

Employers subject to state and federal unemployment insurance laws submit quarterly reports of employment and earnings to the Employment Security Division of the Alaska Department of Labor. Each issue of the STATISTICAL QUARTERLY contains data on total payroll, average monthly wages and employment by industry for each of Alaska's 29 census divisions. It also contains a summary of nonagricultural employment and payroll for the most recently completed calendar year.

Nonagricultural wage and salary earnings are the most comprehensive source of actual earnings data and therefore the most frequently used. Earnings are all renumeration paid to workers covering services performed including commissions, and bonuses. Employment measured by this series more accurately depicts the *number of jobs* as opposed to the *number of individual workers*. It represents the total number of people who worked during the employer's pay period including the 12th of each month. However, it is not an unduplicated count of the number of different individuals because some workers are reported by more than one employer due to dual job holding and labor turnover. Therefore, data measure earnings by job and can only be used as an approximation of earnings by worker. This is especially true in industries with high turnover such as seafood processing.

Annual earnings reflect total actual wages paid by industry and census division. Annual average earnings can be computed by dividing average monthly employment into total payroll. The result is annual average earnings per job, not per worker.

TABLE VIII-1
INCOME MEASURES

	NONAGRICULTURAL WAGE & SALARY EARNINGS	UI COVERED EARNINGS	WORKERS WITH WAGES	CURRENT EMPLOYER STATISTICS BLS 790 HOURS & EARNINGS
Description	Total Payroll and Average Monthly Wage of Nonagricultural Workers	Average Earnings of Alaska UI Covered Workers	20% Sample of Annual Workers with Covered Wages Mean and Median Incomes	Sample Based Estimates of Average Hours Worked Average Weekly Wages, and Average Hourly Wages
Responsible Agency	Alaska Dept. of Labor Research & Analysis	Alaska Dept. of Labor Research & Analysis	Alaska Dept. of Labor Research & Analysis	Alaska Dept. of Labor Research & Analysis
Source of Data	Quarterly Employer Reports of Employment & Wages Subject to Alaska & Federal UI Laws and Nonagricultural Wages (ES 202)	Reports of Employment & Wages Subject to Alaska UI Laws	Reports of Employment and Wages Covered by Alaska Unemployment Insurance	Current Employer Statistics Program - Voluntary Sample of Employers
Time Period	Annual (Previous Year) Average Monthly	Annual (Estimated Current) Average Monthly Average Weekly	Annual	Monthly
Industry Detail	Major Industry (With Some Confidential Restrictions)	Selected Major Industry	Selected Major Industry	Selected Major Industry
Geographic Detail	Alaska 29 Census Divisions	Alaska	Alaska	Alaska
Published In:	Alaska Dept. of Labor *Statistical Quarterly*	Alaska Dept. of Labor *UI Actuarial Report*	Alaska Dept. of Labor *UI Actuarial Report*	Alaska Dept. of Labor *Alaska Economic Trends*

	PERSONAL/ PER CAPITA INCOME	MEDIAN FAMILY INCOME	POVERTY INCOME GUIDELINES	LOWER LEVEL STANDARD INCOME LEVEL (LLSIL)
Description	Current Income Estimates for Total Personal and Per Capita Income	Estimated Personal Family Income used to Determine Program Eligibility or Fee Waivers	Estimated Income used to Determine Program Eligibility	Estimated Income used to Determine Program Eligibility
Responsible Agency	U.S. Dept. of Commerce, Bureau of Economic Analysis	U.S. Dept. of Commerce, Bureau of Census	U.S. Dept. of Commerce, Bureau of Census	U.S. Dept. of Labor, Bureau of Labor Statistics
Source of Data	Estimate Based on Wages; Salaries (80%) Dividends, Proprietors and Self Employed Earnings, etc., (20%)	Estimate Based on Personal Income and Current Population Survey	Dept. of Agriculture Survey and Economy Food Plan	Low Urban Family Budget
Time Period	Quarterly Annual	Quarterly Annual	Annual	Annual
Industry Detail	Major Industry	None	None	None
Geographic Detail	Alaska 29 Census Divisions	Alaska	Alaska	Anchorage (Urban) Balance of State (Rural)
Published In:	*Survey of Current Business*	*Federal Register*	Program Letters	Program Letters

Two average monthly wages by industry are also available in each issue of the STATISTICAL QUARTERLY. One figure contained in the annual table represents the average monthly wage for an entire year. The second is an average monthly wage for a quarter. Both of these averages are calculated by dividing average monthly employment into total payroll. These results are then divided by the number of months in the time period to represent the average monthly wage of an Alaska worker in any given industry or area.

Average weekly wages can be computed three ways using nonagricultural wage and salary earnings published in the STATISTICAL QUARTERLY. While each of these methods is acceptable, they produce slightly different results. The first method described is most commonly used. First, annual average earnings (total payroll divided by average monthly employment) is divided by 52 to generate an approximation of average weekly earnings for a year. Second, total quarterly payroll can be divided by average monthly employment for a quarter; that result is divided by 13 to generate an average weekly earnings figure for the quarter. Finally, average monthly earnings are divided by 4.3 for a third average weekly earnings figure.

Average weekly earnings calculated from STATISTICAL QUARTERLY data are not intended to reflect average weekly earnings for all Alaska workers. Earnings data for given time periods are used to calculate weekly earnings data. Primary drawback in the use of these data is the assumption that each employee works one job for a full month, when in fact one employee can work more than one job and less than one full month. In Alaska, where many workers earn all of their wages during seasonal employment, a true weekly average per worker would be much higher during peak seasonal employment and much lower during inactive periods.

NOTE: Alaska Department of Labor recently underwent a conversion to an automated UI tax system. Problems with the conversion have delayed wage information beyond the normal six month lag. Third quarter 1980 is the most recent data available.

UNEMPLOYMENT INSURANCE COVERED WAGES

This income measure is a subset of nonagricultural wage and salary earnings. The two series differ by the number of federal workers and wage and salary workers excluded from coverage by Alaska's unemployment insurance law. Approximately ten percent of nonagricultural workers are excluded. Table VIII-2 summarizes by industry, annual, monthly, and weekly average earnings of workers and average monthly employment covered by Alaska's unemployment insurance program.

WORKERS WITH WAGES

Each year Research and Analysis draws a 20 percent sample of workers who are covered by the state unemployment insurance law. Annual covered wages are available by industry and state total. Federal wages are not included. This data source includes wages of workers who may have worked only one day in the year. However, it uses the actual number of people as opposed to average employment. Adjusted workers with wages data are available upon request but do not appear in this report. Exclusion of workers who earned less than $1,000 reduces the understatement of average earnings due to workers who may have shorter attachment to the labor force.

BEWARE OF AVERAGE EARNINGS

Care must be exerted when analyzing average earnings. Averages can vary depending upon source of data and method of calculation. For example, two people work six months each for a total of 12 work months. Together they earn $10,000 (Worker 1 earns $6,000 and Worker 2 earns $4,000). Dividing average monthly employment (Total employment divided by 12 months; 12 work months divided by 12 months equals 1) into total wages ($10,000) produces an average wage of $10,000. Dividing total employment (2 workers) into total wages ($10,000) produces an average wage of $5,000. Both are technically correct

TABLE VIII-2
AVERAGE EARNINGS
ALASKA UI COVERED EMPLOYMENT
BY INDUSTRY
1980 1/

	Average Monthly Covered Employment	Annual Average Earnings 2/	Average Weekly Wage 3/	Average Monthly Wage 4/
TOTAL — ALL INDUSTRIES	149,579	$23,380	$450	$1,948
Commodity Producing	31,563	32,178	619	2,682
Oil and Gas	5,937	46,076	886	3,840
Other Mining	550	31,642	609	2,637
Contract Construction	10,590	38,411	739	3,201
Food Processing	7,750	15,829	304	1,319
Logging, Lumber, Pulp	3,492	30,794	592	2,566
Other Manufacturing	2,707	28,827	554	2,402
Other	537	17,981	346	1,498
Distributive	82,596	19,312	371	1,609
Transportation, Communication, Utilities	16,919	29,269	563	2,439
Trade	29,410	16,024	308	1,335
Finance, Insurance, Real Estate	7,798	18,597	358	1,550
Services	28,469	16,987	327	1,416
Government	35,056	25,077	482	2,090
State	14,905	27,699	533	2,308
Local	20,115	23,179	446	1,932

1/ 1980:4 Estimated data will differ from Statistical Quarterly by the number of non-covered and unclassified workers.

2/ Total covered payroll divided by average monthly covered employment.

3/ Annual average earnings divided by 52.

4/ Annual average earnings divided by 12.

average wage figures. Thus, variations in actual earnings are totally obscured leading one to erroneously conclude that averages are accurate measures for "most" workers.

Using UI covered wages, state covered nonagricultural employment and workers with wages data, Table VIII-3 illustrates different annual income figures.

In Table VIII-3, the ratio of all workers to average monthly employment approximates the number of workers per monthly job. Higher ratios occur in the more seasonal industries such as agriculture-forestry-fishing, manufacturing and contract construction. The large difference between the number of workers and the average monthly employment reflects high turnover and seasonality which dominate Alaska's economy. Annual mean income of all workers is 57 percent of annual average earnings per job. This is typical of the Alaska economy where many workers earn all of their wages in part of the year. The annual mean income of all workers more accurately reflects the earnings level of individual Alaska workers while the annual average earnings more accurately depicts earning per job. The median annual income of all workers is that income level at which half of all workers earn more and the other half earns less. The mean and median income levels of all workers is weighted toward the lower end of the earnings curve by many workers who earn small amounts during the year compared to few workers who earn substantially more.

Users of these data who intend to establish a business in Alaska and want to know average industry pay levels would want to use annual average earnings since this figure tells what it costs to hire someone for a year. The user who intends to move to Alaska and wants to know what kind of income to expect might be misled by annual average earnings since, as the table shows, most Alaskans actually earn far less than this.

This user would be better advised to consider the annual income of all workers, particularly if work in the more seasonal industries is probable. Persons interested in entry level wage rates should refer to Table V-6, Wage Rates for Selected Occupations.

Frequent citing of the higher annual average earnings tends to support the popular conception of Alaska being a high wage state where people can get rich quick. While the high wage supposition is supported by annual average earnings per job, the get rich quick corollary is not necessarily supported, as earnings averaged by all workers through the year is considerably less than earnings associated with high annual wages.

To provide further perspective on Alaska's high wages, several studies have claimed that when adjustments are made for living costs and taxes, Alaska's nominally high incomes buy no more than those in other states.

CURRENT EMPLOYMENT STATISTICS (BLS 790) HOURS & EARNINGS

An entirely separate source of income data is the Bureau of Labor Statistics Current Employment Statistics survey of hours and earnings. Each month employers provide payroll information which is used as a sample to estimate for the entire industry. In Alaska the sample in several industries is very small. Alaska data are combined with national sample data to derive national estimates.

TABLE VIII-3
NUMBER OF WORKERS, EMPLOYMENT,
INCOME LEVELS AND
IN UI COVERED1/ EMPLOYMENT 1979

INDUSTRY	NUMBER OF WORKERS 2/	AVERAGE MONTHLY EMPLOYMENT 3/	RATIO ALL WORKERS TO AVERAGE MONTHLY EMPLOYMENT 4/	ALL WORKERS ANNUAL INCOME MEAN 5/	ALL WORKERS ANNUAL INCOME MEDIAN 6/	ANNUAL AVERAGE EARNINGS RATE 7/
TOTAL	249,070	146,603	1.7	$12,081	$6,940	$21,030
AGRICULTURE, FORESTRY, FISHING	1,230	479	2.6	7,973	5,214	23,000
MINING	8,745	5,772	1.5	27,068	25,360	40,448
CONTRACT CONSTRUCTION	19,155	10,091	1.9	16,430	12,505	34,920
MANUFACTURING	30,595	12,818	2.4	7,632	3,751	20,936
TRANSPORTATION, COMMUNICATION	21,785	16,532	1.3	19,873	16,399	27,160
TRADE	45,070	29,487	1.5	8,698	4,187	14,820
FINANCE, INSURANCE AND REAL ESTATE	11,260	8,035	1.4	11,486	8,371	17,271
SERVICES	42,060	27,992	1.5	8,613	4,573	15,317
GOVERNMENT	58,090	35,155	1.7	13,981	11,000	21,018

1/ Coverage Limited to State UI law, [excludes federal government]. Industry data will differ from Statistical Quarterly by the number of non-covered jobs.

2/ Based on 20% sample of workers with covered wages.

3/ ES 202 number of jobs covered by Alaska UI laws.

4/ Number of workers divided by average monthly employment.

5/ Total covered payroll divided by number of workers.

6/ Income level at which 50% of workers are above and 50% of workers are below.

7/ Total annual wages divided by average monthly employment. Reflects annual rate at which one 12-month work year of employment is compensated.

Source: Alaska UI Actuarial Report. Data are derived from a 20% sample of workers earning unemployment insurance wage credits and ES 202 Report.

At the national level these payroll data are used in several ways to gain insight into the economy. Relatively high overtime hours worked are considered an indication that an economic upturn is likely in the near future. Diminishing hours worked indicate that the economy is slowing. Average hourly earnings are used as an approximation of current wage rates.

Hours and earnings estimates for Alaska are available monthly in *Alaska Economic Trends*, an Alaska Department of Labor publication. Both average hourly earnings and average weekly earnings are available for ten industries for nonsupervisory and production workers. While these estimates are less accurate than the unemployment insurance based data, the hours and earnings estimates are available much sooner.

POVERTY INCOME GUIDELINES AND LOWER LIVING STANDARD INCOME LEVELS FOR ALASKA

Poverty Income Guidelines and Lower Living Standard Income Levels (LLSIL) are used as a basis for determining eligibility for certain CETA programs. Participation in certain programs is allowed depending on the applicant income compared with the poverty income level of the LLSIL. For example, to be eligible for services under Title II-B, Title II-D, and Title VII a person must be a member of a family whose annualized income during the previous six months does not exceed the poverty level or 70 percent of the LLSIL. Eligibility for other programs or fee waivers would be provided based on an income that is 80 percent or 100 percent of the LLSIL.

Poverty income guidelines are computed by the U.S. Bureau of the Census. The 1981 estimates of poverty level were based upon 1979 poverty thresholds adjusted by an appropriate inflation factor. Alaska poverty levels were scaled upward by an additional 25 percent over the national average to reflect higher Alaskan costs. See Table VII-4.

The U.S. Bureau of the Census classifies families as above or below the poverty level using a poverty index adopted from the Department of Agriculture's Economy Food Plan and reflects a family's consumption requirements depending on the family size. A Department of Agriculture survey of food consumption found that families of three or more spent one-third of their income on food. Poverty level was set at three times the cost of the economy food plan, a modest level of consumption. Poverty thresholds are updated each year to reflect changes in the consumer price index. (See: U.S. Bureau of the Census, Current Population Reports, Series P60, No. 125, "Money Income and Poverty Status of Families and Persons in the U.S.: 1979," October 1980).

The Lower Living Standard Income Level budget is one of the three budgets of the Bureau of Labor Statistics Family Budget Program. The budget representing a lower standard of living reflects consumer expenditure patterns for the surveyed cities and regions. Table VIII-5 shows LLSIL for Anchorage by family size and by percentage of LLSIL.

TABLE VIII-4
OFFICE OF MANAGEMENT AND BUDGET
POVERTY GUIDELINES FOR ALASKA
EFFECTIVE DATE APRIL, 1981

Size of Family	Nonfarm	Farm
1	$5,410	$4,610
2	7,130	6,070
3	8,850	7,530
4	10,570	8,990
5	12,290	10,450
6	14,010	11,910

For family units with more than 6 members, add $1,720 for each additional member in a nonfarm family and $1,460 for each additional member in a farm fmily.

POVERTY INCOME GUIDELINES
FOR ALL STATES
EXCEPT ALASKA AND HAWAII
1981

Size of Family Unit	Nonfarm Family	Farm Family
1	$4,310	$3,680
2	5,690	4,850
3	7,070	6,020
4	8,450	7,190
5	9,830	8,360
6	11,210	9,530

For family units with more than six members, add $1,380 for each additional member in a nonfarm family and $1,170 for each additional farm family member.

Source: U.S. Department of Labor Employment and Training Administration.

TABLE VIII-5
LOWER LIVING STANDARD
INCOME LEVEL (LLSIL) EFFECTIVE JUNE 1981
ANCHORAGE, ALASKA

Family Size	Poverty Criteria 70% Lower Living Standard Income Level(LLSIL)	Poverty Criteria for 85% Lower Living Standard Income Level (LLSIL)	Poverty Criteria for 100% Lower Living Standard Income Level (LLSIL)
1	$5,290	$6,420	$7,560
2	8,670	10,520	12,380
3	11,900	14,450	17,000
4	14,690	17,840	20,990
5	17,340	21,050	24,760
6	20,270	24,620	28,960

Source: U.S. Department of Labor, Bureau of Labor Statistics.

MEDIAN FAMILY INCOME

Median family income for a family of four is estimated each year by the Department of Commerce, Bureau of Census for each state and the District of Columbia. This income measure is the estimated level at which half of Alaska families earn less and the other half earns more. Median income is estimated based upon personal income data, the March Current Population Survey and 1970 census data. The Census Bureau prepares the estimate on or before December 1 of each year for the following federal fiscal year. The income of any potential family of four requesting aid is compared with the median income estimate to determine eligibility for programs or fee waivers. While official figures presented in Table VIII-6 used national factors to inflate income by family size, 1970 census data revealed that Alaska had a much flatter distribution of earnings as family size increased, than did the national average.

TABLE VIII-6
MEDIAN INCOMES FOR FAMILIES
FOR FY 1982
ALASKA

	Median Income	80% of Median Income	90% of Median Income	115% of Median Income
Family of Four	**$31.037**	**$24.830**	**$27.933**	**$35.693**
Size of Family Unit				
One Person	16,139	12,912	14,525	18,560
Two Person	21,105	16,884	18,994	24,271
Three Person	26,071	20,857	23,464	29,982
Five Person	36,003	29,548	32,402	41,404
Six Person	40,969	32,776	36,872	47,115

PERSONAL INCOME

Personal income is a measure of all sources of current income of residents within an area. The largest component of total personal income is wages as reported to the Alaska Department of Labor. In fact, over 80 percent of total personal income for Alaska is comprised of wages and salaries. Personal income is measured after deductions for social security, government retirement and other social insurance programs, but before deductions for income and other personal taxes. Income from dividends, self-employed earnings and businesses are all included in the measure of total personal income. Estimates of proprietors' income are derived from federal tax return data.

Caution should be exercised when attempting to use personal income data as a measure of the standard of living between areas of the state. Non-cash sources of goods and services, which are important in many rural areas of the state, are not reflected by personal income data. In addition, census division level data is often disaggregated from statewide totals based upon historical relationships, which may make small geographical data less accurate than statewide totals. Many census divisions with low per capita personal incomes also have very high expenditure levels for energy, food and other goods and services which further complicates interregional comparisons of personal income data.

TABLE VIII-7
MEDIAN INCOME FOR FAMILIES OF FOUR
OCTOBER 1, 1981 THROUGH SEPTEMBER 30, 1982

Rank and State	Estimated Median Income
ALL STATES	$22,395
1. ALASKA	$31,037
2. NEVADA	25,457
3. COLORADO	25,228
4. CALIFORNIA	25,109
5. MARYLAND	24,686
6. NEW JERSEY	24,640
7. HAWAII	24,502
8. MICHIGAN	24,422
9. CONNECTICUT	24,410
10. WASHINGTON	24,410
11. MINNESOTA	24,409
12. ILLINOIS	24,265
13. OREGON	24,031
14. MASSACHUSETTS	23,786
15. WISCONSIN	23,518
16. TEXAS	23,416
17. ARIZONA	23,000
18. VIRGINIA	22,976
19. KANSAS	22,848
20. WYOMING	22,673
21. INDIANA	22,614
22. IOWA	22,567
23. OHIO	22,528
24. NEW HAMPSHIRE	22,335
25. PENNSYLVANIA	22,314
26. RHODE ISLAND	21,636
27. GEORGIA	21,578
28. DISTRICT OF COLUMBIA	21,310
29. MISSOURI	21,294
30. UTAH	21,250
31. DELAWARE	21,184
32. NEW YORK	21,082
33. NEW MEXICO	21,032
34. OKLAHOMA	20,852
35. FLORIDA	20,757
36. NEBRASKA	20,749
37. IDAHO	20,429
38. LOUISIANA	20,186
39. SOUTH CAROLINA	20,154
40. MONTANA	20,051
41. NORTH CAROLINA	19,648
42. NORTH DAKOTA	19,520
43. TENNESSEE	19,437
44. VERMONT	19,314
45. SOUTH DAKOTA	19,209
46. KENTUCKY	19,138
47. WEST VIRGINIA	18,876
48. ALABAMA	18,613
49. ARKANSAS	18,493
50. MAINE	18,074
51. MISSISSIPPI	17,672

Source: U.S. Department of Health and Human Services.

TABLE VIII-8
PERSONAL INCOME 1979

	Total Personal Income (In millions of dollars)	Per Capita (Income dollars)	% of National Average	% Change of Total Personal Income from 1978
ALASKA	$4,531.7	$11,152	127*	5
Aleutian Islands	75.9	10,793	123	—2
Anchorage	2171.3	12,200	139	3
Angoon	4.5	5,491	63	22
Barrow-North Slope	47.8	10,018	114	—
Bethel	56.2	5,772	66	11
Bristol Bay Borough	15.7	12,737	145	21
Bristol Bay	23.7	5,973	68	21
Cordova-McCarthy	27.3	11,042	126	14
Fairbanks	664.6	12,308	141	3
Haines	14.1	7,364	84	13
Juneau	267.5	14,605	167	8
Kenai-Cook Inlet	206.1	8,868	101	5
Ketchikan	146.6	14,003	160	10
Kobuk	22.3	4,700	54	—6
Kodiak	95.7	9,615	110	8
Kuskokwim	11.6	3,929	45	—6
Matanuska-Susitna	167.9	8,878	101	12
Nome	48.8	7,223	82	7
Outer Ketchikan	14.1	8,420	96	9
Prince of Wales	24.3	8,690	99	9
Seward	36.0	11,408	130	16
Sitka	101.3	14,064	161	14
Skagway-Yakutat	24.9	8,584	98	14
Southeast Fairbanks	39.3	7,134	81	17
Upper Yukon	16.4	11,091	127	—2
Valdez-Chitina-Whittier	64.1	9,145	104	16
Wade Hampton	13.3	2,737	31	—7
Wrangell-Petersburg	64.1	12,263	140	12
Yukon-Koyukuk	66.1	12,422	142	9

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

1979 Benchmark

TABLE VIII-9
TOTAL AND PER CAPITA PERSONAL INCOME ALASKA AND UNITED STATES 1970-1980

	Alaska Total	U.S. Total ($1,000)	Alaska Per Capita	U.S. Per Capita
1970	$1,438,398	$803,922	$4,726	$3,945
1971	1,578,995	861,904	4,991	4,167
1972	1,725,632	944,852	5,293	4,515
1973	2,033,939	1,058,902	6,110	5,010
1974	2,474,834	1,162,203	7,190	5,448
1975	3,544,374	1,259,430	9,571	5,845
1976	4,216,783	1,386,772	10,750	6,374
1977	4,339,942	1,533,768	10,949	6,979
1978	4,361,149	1,717,816	10,874	7,735
1979	4,567,300	1,939,486	11,355	8,637
1980	5,135,511	2,162,936	12,790	9,521

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

NOTE: Personal income figures are based upon a 1980 benchmark and are not directly comparable to the census division data for 1979 contained in Table VIII-8.

TABLE VIII-10
1980 PER CAPITA PERSONAL INCOME BY STATES

State	Personal Income	Rank
ALABAMA	7,488	47
ALASKA	**12,790**	**1**
ARIZONA	8,791	32
ARKANSAS	7,268	48
CALIFORNIA	10,938	4
COLORADO	10,025	15
CONNECTICUT	11,720	3
DELAWARE	10,339	10
DISTRICT OF COLUMBIA	12,039	2
FLORIDA	8,996	30
GEORGIA	8,073	36
HAWAII	10,101	14
IDAHO	8,056	37
ILLINOIS	10,521	8
INDIANA	8,936	32
IOWA	9,358	25
KANSAS	9,983	16
KENTUCKY	7,613	46
LOUISIANA	8,458	35
MAINE	7,925	38
MARYLAND	10,460	9
MASSACHUSETTS	10,125	13
MICHIGAN	9,950	17
MINNESOTA	9,724	18
MISSISSIPPI	6,580	50
MISSOURI	8,982	31
MONTANA	8,536	34
NEBRASKA	9,365	24
NEVADA	10,727	7
NEW HAMPSHIRE	9,131	28
NEW JERSEY	10,924	5
NEW MEXICO	7,841	39
NEW YORK	10,260	12
NORTH CAROLINA	7,819	41
NORTH DAKOTA	8,747	33
OHIO	9,462	20
OKLAHOMA	9,116	29
OREGON	9,317	27
PENNSYLVANIA	9,434	22
RHODE ISLAND	9,444	21
SOUTH CAROLINA	7,266	49
SOUTH DAKOTA	7,806	42
TENNESSEE	7,720	44
TEXAS	9,545	19
UTAH	7,649	45
VERMONT	7,827	40
VIRGINIA	9,393	23
WASHINGTON	10,309	11
WEST VIRGINIA	7,800	43
WISCONSIN	9,348	26
WYOMING	10,898	6

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Benchmark 1980

CHAPTER IX SPECIAL WORKER GROUPS

Desire for equal employment opportunity and affirmative action for all workers is cause for analysis of special worker groups. Limited data sources preclude analysis of more than veterans, natives, women and economically disadvantaged. The following are not intended to be comprehensive summaries but rather overviews with most recent available data.

VETERANS IN THE LABOR FORCE

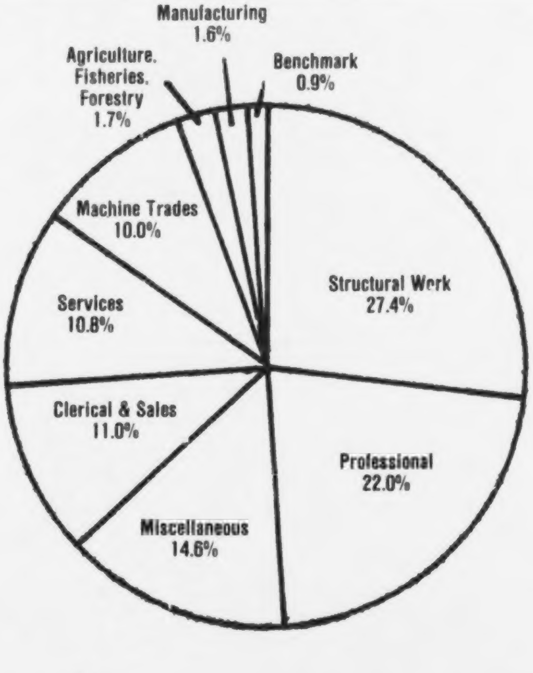
Veterans in Alaska are eligible for many benefits and programs. Due to federal laws providing for health benefits, retirement benefits, reemployment rights and preference for education and housing benefits, the number and characteristics of veterans are of interest to planners and administrators. In 1980 there were an estimated 61,200 male veterans. This estimate is based upon 1970 census relationships of veterans to total population. The number of veterans is expected to increase by less than two percent by 1983. Most recent characteristics data encompasses those veterans who applied for jobs through Alaska employment service offices. Table IX-1 summarizes the characteristics of Alaskan veterans who applied for jobs during fiscal year 1981. Between October 1980 and September 1981 16 percent of all employment service applicants claimed veteran status. Over half of all veterans applicants were Vietnam era veterans and one out of every five applicants was economically disadvantaged. For more information see *Alaska Veteran Report*, January 1980 or *Alaska Economic Trends*, September 1980.

TABLE IX-1
CHARACTERISTICS OF ALASKA VETERANS REGISTERED WITH EMPLOYMENT SERVICE
October 1980 - September 1981

	Number of Veterans	Percent of Total
Total	13,985	100.0
Age:		
Under 20	64	0.5
20-24	1,812	13.0
25-29	2,864	20.5
30-34	3,182	22.8
35-39	1,901	13.6
40-44	1,324	9.5
45-54	1,800	12.8
55-64	959	6.8
65 and Over	79	0.5
Sex:		
Male	13,212	94.5
Female	773	5.5
Veteran:		
Disabled	693	5.0
Veteran Era	7,420	53.1
Special Veteran	2,420	17.3
Economically Disadvantaged	3,158	22.6
Food Stamp	2,637	18.9
Welfare	282	2.0
CETA	85	0.6
Employment Status:		
Full Time	522	3.7
Part Time	177	1.3
Not Working	13,286	95.0
Handicapped:		
Physically Disabled	1,258	9.0

Source: ESARS, Table C06, (Total Active Applicants).

GRAPH IX-1
VETERAN EMPLOYMENT SERVICE APPLICANTS BY OCCUPATION
October 1980 - September 1981



Source: ESARS, Table 96, Total Active Applicants.

NATIVES IN THE LABOR FORCE

According to the 1980 Census of Population there were approximately 64,000 Eskimos, Aleuts and American Indians in Alaska. Until more detailed census data are available, characteristics data must come from the 1976 Survey of Income and Education (SIE) and 1970 census relationships. The Current Population Survey does not provide sufficient detail to analyze the labor force experience of Alaska Natives.

Alaska Natives tend to participate in the labor force to a much lesser extent than non-natives. Data from the 1970 census revealed the percentage of jobholding Alaska Natives to be roughly half of the comparable rate for non-natives. Labor force participation of Alaska Natives is low for two major reasons. First, many unemployed Natives have inadequate experience, education, training or job skills. Secondly, most Natives live outside an effective labor market area in small isolated villages where employment opportunities are limited. These villages, scattered along major riverways and coastal areas, are basic units of subsistence culture. Wage employment opportunities are limited in rural areas and Natives may be reluctant to interrupt their family and village responsibilities to relocate and seek full time employment. Some are willing to temporarily relocate to accept seasonal wage employment as fire-fighters, cannery workers, seafood harvesters or construction workers. Despite receipt of transfer payments, and intermittant seasonal employment.to supplement subsistence lifestyles, low cash incomes tend to place many natives in the economically disadvantaged category.

While estimated employment by industry and occupation was derived from survey based data during pipeline years, the comparison of Native and non-natives illustrates the concentration of Native employment in particular industries and occupations. Nearly ten percent of total SIE wage and salary employment was Alaska Native.

Thirty percent of all Natives are employed in the service industry and 27 percent of all non-natives. The second greatest representation of Natives was in the construction industry. Favored among Native males, construction work is seasonal, pays well, and requires more vocational training than formal education. Native versus non-native representation in construction employment was nearly equal (16 percent Native, 14 percent non-native). Public administration employed 16 percent of all Natives. Alaska Natives have made significant progress into public administration employment through affirmative action policies, the decentralization of state government, and through a BIA policy which allows American Indians to carry contracts providing services to American Indians.

The trade industry employed 12 percent of all Alaska Natives and 22 percent of all non-natives largely reflecting the lack of major employing retail establishments in rural areas. The manufacturing industry employed 10 percent of all Alaska Natives but only 6 percent of non-natives. This differential largely exists because of the availability of jobs within food processing establishments scattered throughout rural areas of the state. This gap may be due in part to a preference on the part of some Natives for seasonal cannery or wood processing employment. As canneries are often found in rural areas, cannery work probably requires less travel than city work. The agriculture, forestry and fisheries industry group employed 6 percent of all Natives yet only 2 percent of all non-natives. This seasonal work seems to be well suited to subsistence oriented people who may live relatively close to work and who may prefer outdoor oriented employment.

Clerical occupations accounted for 18 percent of Alaska Native workers and a similar proportion of non-natives. Service occupations accounted for 18 percent of all Native workers (14 percent non-native). Operatives form the third largest group with 18 percent of all Natives represented (only 10 percent non-native). The relatively greater representation of Natives as operatives is probably due to the fact that this occupation generally provides more on-the-job training and requires less extensive formal education. Laborers form the fourth largest group with 16 percent of all Native workers and 7 percent non-native workers. Laborer jobs are more commonly available in rural areas and may be preferred by some Alaska Natives because they are seasonal in nature, leaving time to pursue traditional subsistence activities.

Six percent of all working Natives surveyed were managers or administrators compared with 12 percent for non-natives. Six percent of the Natives were in professional, technical occupations compared to 16 percent for non-natives, possibly reflecting differences in Natives' educational backgrounds, and again availability of jobs.

TABLE IX-2
ALASKA
INDUSTRY EMPLOYMENT
BY RACE
1976

	ALASKA NATIVE	NON-NATIVE	TOTAL
TOTAL	100 %*	100 %*	100 %*
Agriculture, Forestry & Fisheries	6	2	3
Mining	1	2	2
Construction	16	14	14
Manufacturing	10	6	7
Transportation, Communication, & Public Utilities	7	10	10
Trade	12	22	21
Finance, Insurance, & Real Estate	2	5	4
Service	30	27	27
Public Administration	16	11	12

Source: 1976 Survey of Income and Education.

TABLE IX-3
ALASKA
OCCUPATIONAL EMPLOYMENT
BY RACE
1976

	ALASKA NATIVE	NON-NATIVE	TOTAL
TOTAL	100 %*	100 %*	100 %*
Professional, Technical & Kindred	6	16	15
Managers & Administrators	6	12	12
Sales Workers	3	6	5
Clerical & Sales	18	21	21
Craftsmen & Kindred	13	12	13
Operatives	18	10	11
Laborers	16	7	8
Service Workers	18	14	14
Private Household Workers	2	2	2

Source: 1976 Survey of Income and Education.

* May not add due to rounding.

The current employment situation of many Natives will suffer as federal budget cuts restrict funds. For example, many CETA jobs were lost to Native grantees in fiscal year 1981. These jobs are not likely to be refunded in the foreseeable future. However, a state policy to decentralize delivery of state services may result in new jobs. More Natives may also be hired through the Indian Self-Determination and Educational Assistance Act of 1974 which gives Natives the right to provide themselves federal services designed for their benefit. Improved training programs administered through regional Native corporations should also help Natives to prepare for desired employment. A detailed report on Natives is scheduled to be released in 1982.

ECONOMICALLY DISADVANTAGED

An economically disadvantaged person is a member of a family that either receives or qualifies for public assistance, whose income does not exceed 70 percent of the lower living standard income level or the poverty guidelines established by the U.S. Office of Management and Budget. Foster children on whose behalf state or local government payments are made are considered economically disadvantaged. Economically disadvantaged also includes clients of sheltered workshops, handicapped individuals, and persons residing in a 24 hour support facility (prison, hospital or community care facility) or similar institution. Current poverty guidelines and lower living standard income levels in effect are listed in the section on income measures.

It is difficult to quantify economically disadvantaged individuals and obtain current detailed characteristics. However, several data sources may be used as approximations until 1980 Census of Population data are available. In 1980, an estimated 72,000 Alaskans were economically disadvantaged. This estimate assumes 1970 census relationships remained constant. By 1983, more than 76,000 persons are estimated to be economically disadvantaged. Many of these people are not actively participating in the labor force. Roughly half of all economically disadvantaged individuals are believed to participate in the labor force.

One of the more comprehensive sources of characteristics data of economically disadvantaged individuals who participate in the labor force is available from the Employment Service Automated Reporting System (ESARS) of the Alaska Department of Labor. ESARS data understate the total number of economically disadvantaged by those not seeking work or seeking work through other sources, including Natives participating in individual Native corporation employment and training programs. One out of every five employment service applicants was economically disadvantaged between October 1980 and September 1981. The following table illustrates the characteristic breakdown of those economically disadvantaged persons using employment service offices around Alaska for the 12 month period.

Two other data sources illustrate the number of individuals receiving government transfer payments at a specific point in time. These data can also be used as a proxy for characteristics of economically disadvantaged persons. The racial breakdown of food stamp recipients is given for August 1981. Public Assistance caseloads are also presented as a point in time indicator of the breakdown of racial characteristics by type of transfer payment.

TABLE IX-4
STATEWIDE CHARACTERISTICS OF ECONOMICALLY DISADVANTAGED REGISTERED WITH JOB SERVICE
October 1980 - September 1981

TOTAL	21,038	PERCENTAGE DISTRIBUTION
AGE		
15 and Under	179	.9
16-17	567	2.7
18-19	1,893	9.0
20-21	2,419	11.5
22-25	3,522	16.7
25-29	4,333	20.6
30-34	2,947	14.0
35-39	1,781	8.5
40-44	1,181	5.6
45-54	1,540	7.3
55-64	628	3.0
65 and Over	48	.2
SEX		
Male	12,069	57.4
Female	8,969	42.6
Highest School Grade		
0-7	1,220	5.8
8-11	5,651	26.9
12	9,779	46.5
Over 12	4,388	20.9
RESIDENCE		
Urban	11,204	53.3
Rural	9,834	46.7
ETHNIC GROUP		
White (Not Hispanic)	12,094	57.5
Black (Not Hispanic)	1,116	5.3
Hispanic	409	1.9
Amer. Indian & Alaska Native	6,576	31.3
Asian & Pacific Islander	359	1.7
INA	484	2.3
VETERAN	3,158	15.0
Disabled	152	.7
Vietnam Era	1,575	7.5
Special Veteran	491	2.3
HANDICAPPED	919	4.4
Physically Disabled	885	4.2
Mentally Retarded	24	.1
Mentally Restored	10	—
Food Stamp Recipient	11,499	54.7
Welfare	3,697	17.6
W.I.N.	2,124	10.1
C.E.T.A.	377	1.8
EMPLOYMENT STATUS		
Full Time	545	2.6
Part Time	449	2.1
Not Working	20,044	95.3

Source: Alaska Department of Labor, Employment Security Division, ESARS, Table B06 (includes partially registered applicants).

TABLE IX-5
ALASKA
PUBLIC ASSISTANCE CASELOADS
BY RACE
September 1981

	TOTAL	WHITE	NATIVE	BLACK	OTHER	UNKNOWN
ALASKA	16.484	8,144	5,957	894	469	1.020
OAA	2,499	653	1,624	56	89	77
ABL	60	15	43	1	0	1
APD	2.301	840	1,255	69	51	86
AFDC	6,465	2,785	2,889	482	158	151
GRM	3.638	2.656	104	165	110	603
GRA	1,521	1,195	42	121	61	102

Source: Department of Health & Social Services. Division of Assistance Payments.

OAA	Old Age Assistance
ABL	Aid to the Blind
APD	Aid to the Permanently Disabled
AFDC	Aid to Families with Dependent Children
GRM	General Relief Medical
GRA	General Relief Assistance

TABLE IX-6
ALASKA FOOD STAMP RECIPIENTS
August 1981

	Head of Households	Number of Individuals
TOTAL	11,658	32,257
Receiving Public Assistance	4,080	11,290
Not Receiving Public Assistance	7,578	20,967

TABLE IX-7
ALASKA
RACIAL DISTRIBUTION OF FOOD STAMP RECIPIENTS
August 1981

Race	Percentage of Individuals
White	46.4%
Native	39.7%
Black	6.7%
Other	0.2%
Unknown	4.6%

WOMEN IN THE LABOR FORCE

The evolving role of women in the Alaska labor force has considerable impact upon labor market analyses. Forty-seven percent of all Alaskans are women, and according to the 1980 Current Population Survey, nearly two thirds of Alaska's civilian noninstitutionalized women participate in the labor force. In 1970, 46 percent of women 16 years and older participated in the labor force. An increasing participation rate has resulted from changing family structures and changing social viewpoints. Often economic need dictates that the women must work to supplement family income. Whatever the reason, women undisputably contribute and will continue to contribute, to the Alaskan labor force.

The issue today is the occupational distribution and earnings potential of women. According to the September 1981 Current Employment Survey (BLS 790) women are still highly concentrated in relatively lower paying industries. Based on survey results, women comprised nearly 60 percent of total service industry employment and 75 percent of finance, insurance and real estate employment. Women were much less prominent in mining and construction industries with 17 percent and 8 percent, respectively. Forty-three percent of all employment service applicants were women during fiscal year 1981 and the average placement wage for women was $5.74 per hour compared to $6.36 for men. According to the State of Alaska Equal Employment Opportunity Division, September 1981 hiring statistics, nearly half of all state government employees are women; based upon entry level salaries 74 percent of these women earn less than $22,500 a year. Five times as many men as women earn more than $48,000 annually. According to *A Women's Guide to Apprenticeship* (U.S. Department of Labor) over half a million of the 12 1/2 million skilled blue collar workers nationwide were women in 1978. About one fourth of these women were in lower paid skilled jobs that are closely related to homemaking skills. Among many higher paid skilled workers, the proportion of women ranged from less than one percent to about five percent.

Overnight employment equality will not occur. Time, career education and training are necessary to dispel traditional social and moral myths that bar women from the opportunity for equal employment status. For more detailed information see *Women in Alaska's Labor Force,* May 1980 or *Alaska Economic Trends,* October 1980.

TABLE IX-8
CHARACTERISTICS OF FEMALE EMPLOYMENT SERVICE APPLICANTS IN ALASKA
October 1, 1980 - September 30, 1981

	Female	Percent Distribution	Percent of All Applicants By Occupation
TOTAL	9,546	100.0	43.6
Professional, Technical, Managerial	1,653	17.3	46.0
Clerical, Sales	4,819	50.5	81.5
Services	2,188	22.9	56.4
Farm, Fish, Forestry	107	1.1	22.9
Processing	257	2.7	32.5
Machine Trades	29	0.3	2.9
Bench Work	66	0.7	39.1
Structural	139	1.5	3.7
Transport	288	3.0	12.3

Source: Employment Security Automated Reporting System, Table 96, (Applicants Referred to a Job Opening).

TABLE IX-9
CHARACTERISTICS OF FEMALE EMPLOYMENT SERVICE APPLICANTS IN ALASKA
October 1, 1980 - September 30, 1981

	Female	Percent Distribution
TOTAL	38,201	100.0
AGE		
Less than 15	486	1.3
16-17	1,868	4.9
18-19	3,947	10.3
20-21	4,303	11.3
22-24	5,905	15.5
25-29	7,752	20.3
30-34	4,943	12.9
35-39	3,083	8.1
40-44	2,003	5.2
45-54	2,606	6.8
55-64	1,158	3.0
65 and Over	147	0.4
Education (Years)		
0-7	775	2.0
8-11	7,609	20.0
12	17,564	46.0
12 and Over	12,253	32.0
Race		
White	29,117	76.2
Black	1,683	4.4
Hispanic	649	1.7
Native	5,597	14.7

Source: Employment Security Automated Reporting System, Table D06, (Applicants Active at any Time, FY 81).

Glossary

Abbreviations

BLS	Bureau of Labor Statistics
CES	Current Employment Statistics
CETA	Comprehensive Employment and Training Act of 1973
CPI	Consumer Price Index
CPS	Current Population Survey
DOT	Dictionary of Occupational Titles
ES	Employment Service
ESARS	Employment Security Automated Reporting System
ETA	Employment and Training Administration
LMI	Labor Market Information
OES	Occupational Employment Statistics
SIC	Standard Industrial Classification
SMSA	Standard Metropolitan Statistical Area
UI	Unemployment Insurance

Annual Average - The aggregate of 12 months data divided by 12. Annual average data are commonly used for projections and other long-term analyses.

Benchmark - Most economic time series utilize a sample trend made of the best available data at the time. Periodically the series is adjusted due to more complete information being available. This periodic adjustment is a Benchmark Revision and the point-in-time for which the more complete data was available is the Benchmark date. Data is commonly referenced by its benchmark, e.g., "data based on a March 1976 benchmark."

Civilian Labor Force - See **Labor Force.**

Comprehensive Employment and Training Act of 1973 (CETA) - An act which set up a decentralized system of job training, Public Service Employment (PSE) and other employment services. This act provides federal grants to selected prime sponsors and replaced the Manpower Development and Training Act (MDTA).

Consumer Price Index (CPI) - Officially titled the Consumer Price Index, this index measures changes over time in a predetermined marketbasket of goods and services. Most goods and services are covered in the marketbasket as well as sales and excise taxes, but income and property are not included. The CPI is not a true cost of living index nor can it be compared between areas to determine their relative cost of living.

Covered Employment - Employment in an industry that falls under the coverage of state or federal unemployment insurance programs. In Alaska presently only agriculture, self-employed, some employed students, religious organizations, full commissioned salesmen, fisherfolk, private railroad and elected and appointed officials have significant numbers of noncovered workers.

Current Employment Statistics (CES) - Estimates of nonagricultural wage and salary employment and production worker hours and earnings by industry. These estimates are produced monthly for Alaska from a sample of employing establishments in cooperation with the Bureau of Labor Statistics.

Current Population Survey (CPS) - A monthly household survey of the population of the United States. This survey is the data source for the national estimates of labor force composition. Some CPS data is also incorporated into the state and area labor force estimating procedures to improve interstate comparability.

Disabled Veteran - A person entitled to disabilty compensation under laws administered by the Veterans Administration for disability rated 30 percent or more, or a person whose discharge or release from active duty was for a disability incurred or aggravated in the line of duty.

Discouraged Workers - Persons who want work but made no attempt to find work in the past four weeks because of a belief that they could not find employment. Discouraged workers are not counted among the unemployed.

DOT Codes - An occupational coding structure based upon job traits and relationships. The codes are published in the Dictionary of Occupational Titles, Fourth Edition, 1977.

Economically Disadvantaged - A person who is either:

a. A member of a family which receives public assistance;
b. A member of a family whose income during the previous 6 months on an annualized basis was such that:
  1. The family would have qualified for public assistance; or
  2. It does not exceed the poverty level; or
  3. It does not exceed 70 percent of the lower living standard income level;
c. A foster child on whose behalf state or local government payments are made;
d. Where such status presents significant barriers to employment,
  1. A client of a sheltered workshop;
  2. A handicapped individual;
  3. A person residing in an institution or facility providing 24 hour support such as a prison, a hospital or community care facility; or
  4. A regular outpatient of a mental hospital, rehabilitation facility or similar institution.

Employment by Place of Residence - An estimate of the number of persons employed who live within a given labor market or other geographic area. All persons who worked for pay and unpaid family workers who worked at least 15 hours or more in the survey week are included, as are workers who were temporarily absent from their job due to vacations, labor disputes, etc.

Employment by Place of Work - An estimate of the number of jobs filled in the survey week within a given area. Multiple job holders are counted for each job. In Alaska only nonagricultural wage and salary workers are tallied by place of work. Labor disputants are not included in estimates of employment by place of work.

Employment Security Automated Reporting System (ESARS) - A computerized tally of all Employment Service activities, job applicants, and job openings characteristics.

Extrapolate - To estimate by extending or projecting known information.

Farm Family - For CETA purposes, a family living in rural territory, (outside the corporate limits of a city of 2,500 population or more, or outside an urbanized area contiguous to such a city) on places of 10 or more acres from which the annual sales of farm products amounted to $50 or more, or on places of less than 10 acres from which annual sales of farm products amounted to $250 or more.

Handbook Procedure for Estimating Unemployment - A synthetic estimating procedure which utilizes the following data: nonagricultural wage and salary employment, unemployment insurance claims, 1970 census relationships, historical factors from special research by the Bureau of Labor Statistics, and current data from the CPS. The handbook estimates account for most of the month-to-month trend of the labor force estimates; while the monthly CPS predominantly determines the level.

Index or Index Number - A measure of relative growth compared with a base figure for the same time series. In index form, the base period is set equal to 100, and data for other periods are expressed as percentages of the base value. Plural is indices.

Insured Unemployment - A count of persons who have filed claims for state unemployment insurance benefits.

Insured Unemployment Rate - An administrative tool which is the ratio of insured unemployment to covered employment lagged six months.

Interpolate - To determine an unknown value between two known values.

Labor Force - All persons 16 years and older who are either employed or unemployed. Normally published as a Civilian Labor Force by Place of Residence (See Employment by Place of Residence).

Labor Market Area - An area with a central community and economic concentration in which workers can generally change jobs without changing their residence. In most states labor market areas are either counties or groups of counties.

Labor Market Information (LMI) - Data on a broad range of topics such as labor force, employment by industry and occupation, unemployment, population, earnings, wages, hours worked, training programs and labor turnover.

Labor Turnover - Movement of workers in and out of employment in a given time in an industry, occupation or firm.

Lower Living Standard Income Level (LLSIL) - Used for ES and CETA purposes it is that income level (adjusted for selected Standard Metropolitan Statistical Areas (SMSAS) and regional metropolitan and non-metropolitan differences and family size) determined annually based upon the most recent lower living standard budget level issued by the Bureau of Labor Statistics of the Department of Labor.

Multiple Job Holders - Persons who simultaneously work at more than one job.

Nonagricultural Wage and Salary Employment - Place of work employment that does not include the self-employed, unpaid family workers, domestics or agricultural workers. Conceptually, this is probably the most consistent economic time series available to compare different labor markets over an extended period of time. (See Employment by Place of Work).

Occupational Employment Statistics (OES) - A program which produces occupational data for major industries once every three years. Projections by occupation are made which aid educators and other occupational planners.

Part-time Work - Work that is less than 35 hours per week.

Per Capita Income - Total personal income divided by total population.

Personal Income, Total - Private and government wage and salary payments in cash and in kind, other labor income, farm and nonfarm proprietors' income, interest, net rents, dividends and transfer payments, less personal contributions for social insurance. It is measured before the deduction of personal income and other personal taxes. Dollars are not adjusted for change in consumer price index.

Physically Disabled Handicapped - Any person who has one or more physical disabilities that substantially limits one or more major life activities.

Poverty Level - Used for ES and CETA purposes it is the annual income threshold below which families are considered to live in poverty, as determined in accordance with criteria established by the Director of the Office of Management and Budget.

Prime Sponsor - Used for CETA purposes it is a unit of government, combinations of units of government, or a rural Concentrated Employment Program grantee, as set forth in the CETA regulations which has entered into a grant to provide comprehensive manpower services under Title I of CETA

Race/Ethnic Group - The basic racial and ethnic categories for all ETA programs are defined as follows:

> White, Not Hispanic - A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
>
> Black, Not Hispanic - A person having origins in any of the black racial groups of Africa.
>
> Hispanic - A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.
>
> American Indian or Alaskan Native - A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
>
> Asian or Pacific Islander - A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philipine Islands, and Samoa.

Seasonal Adjustment - Minimizes the changes in any time series from normal annual occurrences, such as Christmas, summer vacations, and weather. After seasonal adjustment any month can be compared with the economic trends of any other month. Differences should then be due to economic trends or unusual occurrences. Seasonally adjusted data more accurately portray underlying economic trends, but should not be used where the current level is more important to the data user than the economic trend. No meaningful seasonal adjustment exists for annual or annual average data since the purpose is to make monthly or quarterly data comparable to the annual average data.

SIC Codes - Standard Industrial Classification code structure in which all establishments are classified by a four-digit code according to their primary economic activity. Frequently references will be made to SIC codes at the one, two, or three digit levels when a less specific classification is useful.

Standard Metropolitan Statistics Area (SMSA) - Consists of areas that are economically and socially integrated with a large population nucleus. Specifically, an SMSA includes:

1) one central city with 50,000 inhabitants or more, or

2) a central city with at least 25,000 inhabitants provided that two conditions exist:
   a) that the city's population taken together with that of contiguous places totals at least 50,000 inhabitants and constitutes for general economic and social purposes a single community, and

   b) that the areas in which these places are located have at least 75,000 inhabitants.

Survey Week - The week that includes the 12th of the month is used as a reference period for most labor force data.

Time Series - A set of consistent economic quantitative data collected at periodic intervals (most labor market information is monthly, but weekly and annual data is published for some items).

Underemployment - A term that includes both persons who are working part-time who would prefer full-time work, and persons working full-time in an occupation which does not utilize their skills derived from prior training or experience.

Unemployment - Persons who were not employed during the monthly survey week but were available for work and had either (1) overtly engaged in a job-seeking activity within the four week period up to and including the survey week; (2) were waiting to be recalled from a layoff; or (3) were waiting to report to a new wage and salary job within 30 days.

Unemployment Rate - The number of unemployed persons expressed as a percentage of the labor force. Commonly the seasonally adjusted unemployment rate is referred to as the unemployment rate and it is usually the only rate quoted in the monthly news release on the U.S. unemployment situation (see Seasonal Adjustment). Alaska's unemployment rate is not seasonally adjusted. Comparisons to the national rate should be based on seasonally unadjusted rates.

Work Incentive Program (WIN) - Counseling, training, job development and supportive services are provided to employable recipients of Aid-to-Families-with-Dependent-Children (AFDC). The object is to place AFDC recipients into suitable employment.

BALANCE OF ALASKA: CETA PRIME SPONSOR Each year the Alaska Department of Labor provides labor market information to assist CETA planners in the administration of CETA programs. The CETA Division of the Alaska Department of Community and Regional Affairs is responsible for program administration to all of Alaska except the Municipality of Anchorage. Data in this section encompass the same time frames and are subject to the same references and limitations as data for Alaska elsewhere in this publication.

TABLE A-1
BALANCE OF ALASKA
POPULATION CHARACTERISTICS

	1980	1983
TOTAL	227,464	238,600
Male	124,171	130,300
Female	103,293	108,300
Age		
0-19	83,830	88,600
20-21	10,949	12,400
22-44	93,240	95,800
45-54	19,008	19,900
55 and Over	20,435	22,100
Race		
White (Non Hispanic)	157,089	165,100
Black (Non Hispanic)	4,287	4,500
Hispanic	4,288	4,400
American Indian, Eskimo, Aleut	55,146	56,100
Asian, Pacific Islander	4,016	4,200
Number of Persons = 25 years, completed High School	91,498	91,600
Male Veterans	33,647	59,400

Source: Alaska Department of Labor, State Demographer; Age and Race detail derived from official 1980 Census data; Characteristics data (eg., male, vets, etc.) derived using 1970 Census data, 1975 Survey of Income and Education and available 1980 Census data.

TABLE A-2
NONAGRICULTURAL EMPLOYMENT BY INDUSTRY
ANNUAL AVERAGE
BALANCE OF ALASKA

	1980 Actual 1/	1981 Projection	1982 Projection	1983 Projection
Total Employment	91,000	94,800	99,300	104,100
Mining	3,900	4,300	5,000	5,600
Construction	4,900	5,700	6,300	6,500
Manufacturing	12,100	11,300	11,900	12,400
Trans./Comm./Utilities	9,100	9,300	9,500	9,800
Transportation	5,600	5,800	5,900	6,000
Communication	2,700	2,600	2,600	2,800
Utilities	800	900	900	1,000
Trade	12,700	14,100	14,600	14,900
Wholesale	1,500	1,700	2,000	2,000
Retail	11,200	12,400	12,600	12,900
Finance/Ins./Real Estate	2,800	3,000	2,900	3,200
Services	13,100	14,000	14,800	15,300
Civilian Government	32,300	33,100	34,300	35,300
Federal	8,300	8,100	8,300	8,300
State	10,400	10,900	11,400	12,100
Local	13,600	14,100	14,600	14,900
Miscellaneous	100	100	100	100

1/ 1980:4 Estimated.

Sources: Alaska Department of Labor, Research and Analysis ES 202 Federal Report of Employment and Wages, BLS 790 Current Employment Statistics and LABMOD Projections.

TABLE A-3
BALANCE OF ALASKA
(EXCLUDES ANCHORAGE)
NONAGRICULTURAL EMPLOYMENT
BY INDUSTRY
ANNUAL AVERAGE PERCENT CHANGE

	1980 1/ to 1981	1981 to 1982	1982 to 1983
Total Employment	4.2	4.7	4.8
Mining	10.3	16.3	12.0
Construction	16.3	10.5	3.2
Manufacturing	-6.6	5.3	4.2
Trans./Comm./Utilities	2.2	2.2	5.4
Transportation	3.6	1.7	1.7
Communications	-3.7	0.0	7.7
Utilities	12.5	0.0	11.1
Trade	11.0	3.5	2.1
Wholesale	13.3	17.6	0.0
Retail	10.7	1.6	2.4
Finance, Ins., Real Estate	7.1	3.3	10.3
Services	6.9	5.7	3.4
Civilian Government	2.5	3.6	2.9
Federal	-2.4	2.5	0.0
State	4.8	4.6	6.1
Local	3.7	3.5	2.1
Miscellaneous	0.0	0.0	0.0

1/ 1980:4 Estimated

Sources: ES 202, Federal Report of Employment and Wages, BLS 790 Current Employment Statistics and LABMOD Projections.

TABLE A-4
LOWER LIVING STANDARD
INCOME LEVEL (LLSIL) EFFECTIVE JUNE 1981
BALANCE OF ALASKA

Family Size	Poverty Criteria 70% Lower Living Standard Income Level(LLSIL)	Poverty Criteria for 85% Lower Living Standard Income Level (LLSIL)	Poverty Criteria for 100% Lower Living Standard Income Level (LLSIL)
1	$4,970	$6,040	$7,100
2	8,150	9,890	11,640
3	11,190	13,580	15,980
4	13,810	16,770	19,730
5	16,300	19,790	23,280
6	19,060	23,140	27,230

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE A-5
PUBLIC ASSISTANCE CASELOADS BY RACE
SEPTEMBER 1981
BALANCE OF STATE

	White	Native	Black	Other	Unknown	TOTAL
Total	4,072	4,945	210	148	568	9,943
OAA	377	1,523	12	38	48	1,998
ABL	6	37	0	0	1	44
APD	445	972	27	23	52	1,519
AFDC	1,387	2,346	101	42	95	3,971
GRM	1,398	48	38	32	331	1,847
GRA	459	19	32	13	41	564

Source: Department of Health and Social Services, Division of Assistance Payments.

OAA: Old Age Assistance
ABL: Aid to the Blind
APD: Aid to the Permanently Disabled
AFDC: Aid to Families with Dependent Children
GRM: General Relief Medical
GRA: General Relief Assistance

TABLE A-6
ESTIMATED EMPLOYMENT BY OCCUPATION AND GROWTH AND REPLACEMENT NEEDS
BALANCE OF ALASKA

				AVG. ANNUAL JOB OPENINGS 1981 1986		
OES OCCUPATION TITLE	1981	1982	1986	TOTAL	DUE TO GROWTH	DUE TO SEPARATIONS
TOTAL EMPLOYMENT	101,772	106,509	128,772	7,990	5,410	2,580
Offices and Managers	8,777	9,194	11,158	730	477	253
Professionals	13,796	14,416	16,957	1,004	638	366
Technicians	5,020	5,261	6,391	357	277	80
Service Workers	14,196	15,009	18,172	1,260	796	464
Crafts; Operators, Laborers	38,234	39,735	47,883	2,673	1,928	745
Clerical Workers	18,306	19,220	23,414	1,598	1,022	576
Sales People	3,443	3,674	4,797	369	272	97

Source: Alaska Department of Labor, Research and Analysis Occupational Employment Statistics.

TABLE A-7
CHARACTERISTICS OF BALANCE OF STATE EMPLOYMENT SERVICE APPLICANTS
October 1980 - September 1981

		Percentage Distribution //
Total	41,221	
AGE		
15 & Under	658	1.6
16-17	2,122	5.1
18-19	4,121	10.0
20-21	4,292	10.4
22-25	6,186	15.0
25-29	8,480	20.6
30-34	5,846	14.2
35-39	3,271	7.9
40-44	2,107	5.1
45-54	2,674	6.5
55-64	1,266	3.1
65 & Over	198	0.5
SEX		
Male	22,749	55.2
Female	18,472	44.8
HIGHEST SCHOOL GRADE		
0-7	820	2.0
8-11	8,504	20.6
12	18,628	45.2
Over 12	13,269	32.2
RESIDENCE		
Urban	23,037	55.9
Rural	18,184	44.1
ETHNIC GROUP		
White (Not Hispanic)	32,425	78.7
Black (Not Hispanic)	907	2.2
Hispanic	512	1.2
Am. Indian & Ak. Native	6,280	15.2
Asian & Pacific Islander	839	2.0
INA	258	0.6

		Percentage Distribution
VETERAN	6,625	16.1
Disabled	304	0.7
Vietnam Era	3,387	8.2
Special Veteran	1,043	2.5
HANDICAPPED	1,069	2.6
Physically Disabled	1,036	2.5
Mentally Retarded	23	0.1
Mentally Restored	10	—
ECONOMICALLY DISADVANTAGED	7,689	18.7
Food Stamp Work Req.	7,617	18.5
WELFARE	1,053	2.6
W.I.N.	273	0.7
CETA	400	1.0
EMPLOYMENT STATUS		
Full Time	1,546	3.8
Part Time	943	2.3
Not Working	38,732	94.0

// *May not add due to rounding.*

Source: ESARS. Table 6. (excludes partially registered applicants).

TABLE A-8
BALANCE OF ALASKA
ACTIVE APPLICANTS, JOB ORDERS RECEIVED AND OPENINGS FILLED BY OCCUPATIONAL TITLE 1/
(WITH 50 OR MORE APPLICANTS)
October 1980 - September 1981

Occupation Codes	Occupations	Experienced Active Applicants	Job Openings Received	Openings Filled	Openings Unfilled or Cancelled	% Unfilled or Cancelled	Ratio Active Applicants To Job Openings 2/
0-1	**Professional, Technical & Managerial**	5,001	1,480	1,002	478	32	3.4
003161014	Electronics Technician	97	30	25	5	17	3.2
005061014	Civil Engineer	44	14	4	10	71	3.1
005281010/ 005281014	Drafter, Civil & Structural	16	61	36	25	41	0.3
041061030	Biologist	159	8	6	2	25	19.9
045107010	Counselor	220	55	38	17	31	4.0
075374010	Nurse, General Duty	109	34	31	3	9	3.2
079367010	Medical Assistant	27	5	3	2	40	5.4
079371010	Dental Assistant	86	30	19	11	37	2.9
079374014	Nurse, Licensed Practical	47	17	13	4	24	2.8
091227010	Teacher, Secondary Edu.	75	7	1	6	86	10.7
092227010	Teacher, Elem. School	157	12	10	2	17	13.1
	Accountant	99	27	17	10	37	3.7
	Purchasing Agent	68	14	9	5	36	4.9
163167018	Manager, Sales	25	5	5	0	—	5.0
165067010	Public Relations Representatives	33	9	6	3	33	3.7
169167010	Administrative Assistant	260	64	46	18	28	4.1
185167046	Manager, Office	120	32	23	9	28	3.8
169167034	Manager, Retail Store	78	12	9	3	25	6.5
187167106	Manager, Food Service	60	10	4	6	60	6.0
193162018	Air-Traffic Control Specialist, Tower	17	0	0	0	—	—
195107010	Caseworker	33	6	3	3	50	5.5
2	**Clerical & Sales**	9,468	5,839	4,484	1,355	23	1.6
	Clerical	8,017	4,824	3,744	1,080	22	1.7
201362010	Legal Secretaries	96	78	56	22	28	1.2
201362030	Secretary	888	393	294	99	25	2.3
203362010	Clerk-Typist	561	502	416	86	17	1.1
203582030	Keypunch Operator	61	16	12	4	25	3.8
206362010	File Clerk	40	39	35	4	10	1.0
209562010	Clerk, General	1,292	579	468	111	19	2.2
209587026	Mail Clerk	27	15	10	5	33	1.8
210382010	Audit Clerk	16	16	14	2	13	1.0
210382014	Bookkeeper	636	382	237	145	38	1.7
211362010	Cashier	702	193	107	86	45	3.6
211362018	Teller	134	201	166	35	17	0.7
213362010	Computer Operator	54	8	8	0	—	6.8
215482010	Payroll Clerk	40	22	15	7	32	1.8
216482010	Accounting Clerk	330	189	142	47	25	1.8
219362010	Administrative Clerk	883	368	277	91	25	2.4
222387058	Stock Clerk	188	87	62	25	29	2.2
235662022	Telephone Operator	64	37	27	10	27	1.7
237367038	Receptionist	428	222	159	63	28	1.9
238362010	Hotel Clerk	69	135	99	36	27	0.5
238367026	Ticket Agent	30	23	20	3	13	1.3
249367074	Teacher Aide	83	43	40	3	7	1.9

TABLE A-8
BALANCE OF ALASKA
ACTIVE APPLICANTS, JOB ORDERS RECEIVED AND OPENINGS FILLED BY OCCUPATIONAL TITLE 1/
(WITH 50 OR MORE APPLICANTS)
October 1980 - September 1981
(Continued)

	Sales	1,451	1,015	740	275	27	1.4
279357050	Salesperson, General Hardware	24	26	14	12	46	0.9
279357054	Salesperson, General Merchandise	319	114	83	31	27	2.8
290477014	Salesperson, Parts	39	36	26	10	28	1.1
	Sales Clerk	571	248	189	59	24	2.3
292353010	Sales Clerk, Food	76	48	42	6	13	1.6
	Driver, Sales Route	37	23	16	7	30	1.6
3	**Services**	5,840	5,983	4,635	1,348	23	0.9
30	**Domestic Services**	526	982	845	137	14	0.5
31	**Services, Public Orientated**	3,082	2,982	2,168	814	27	1.0
311477014	Counter Attendant, Lunchroom or Coffee Shop	75	220	152	68	31	0.3
312474010	Bartender	368	114	67	47	41	3.2
313131014	Chef	34	10	6	4	40	3.4
313361014	Cook, Restaurant	411	322	242	80	25	1.3
313361022	Cook, Short Order	148	156	104	52	33	0.9
315361010	Cook, Mess	280	114	76	38	33	2.5
316684018	Meat Cutter	40	9	5	4	44	4.4
317684014	Pantry, Goods Maker	10	20	11	9	45	0.5
317687010	Cook Helper	62	16	13	3	19	3.9
318687010	Kitchen Helper	352	563	456	107	19	0.6
323687014	Scullion	212	283	222	61	22	0.8
332271010	Cosmetologist	34	12	1	11	92	2.8
355674014	Nurse Aide	249	68	50	18	26	3.7
359677010	Attendant, Children's Institution	37	43	35	8	19	0.9
359677018	Nursery School Attendant	119	148	122	26	18	0.8
372667034	Guard, Security	68	42	38	4	10	1.6
372667038	Merchant Patroller	45	6	4	2	33	7.5
373364010	Fire Fighter	48	53	18	35	66	0.9
375263014	Police Officer	57	9	6	3	33	6.3
382664010	Janitor	474	302	274	28	9	1.6
4	**Agricultural, Fishery, Forestry**	1,282	1,534	1,442	92	6	0.8
452364010	Forester Aide	127	99	91	8	8	1.3
452687014	Forest-Fire Fighter	175	370	372	—	—	0.5
5	**Processing Occupations**	1,899	4,482	4,079	403	9	0.4
526381010	Baker	32	5	3	2	40	6.4
529686014	Cannery Worker	1,650	4,247	3,859	388	9	0.4

TABLE A-8
BALANCE OF ALASKA
ACTIVE APPLICANTS, JOB ORDERS RECEIVED AND OPENINGS FILLED BY OCCUPATIONAL TITLE [1]
(WITH 50 OR MORE APPLICANTS)
October 1980 - September 1981
(Continued)

6	**Machine Trade Occup.**	1,493	422	312	110	26	3.5
600280022	Die Sinker	51	9	5	4	44	5.7
620261010	Automobile Mechanic	332	103	80	23	22	3.2
620261022	Construction-Equipment Mechanic	146	37	28	9	24	4.0
620281046	Maintenance Mechanic, Shop	37	7	7	0	—	5.3
621281014	Airframe-and-Power Plant Mechanic	66	16	10	6	38	4.1
625281010	Diesel Mechanic	128	48	39	9	19	2.7
625281034	Small-Engine Mechanic	25	7	7	0	—	3.6
638281014	Maintenance Mechanic, Machine Servicer	48	5	2	3	60	9.6
638281018	Millwright	35	16	9	7	44	2.2
7	**Benchwork**	209	122	81	41	34	1.7
8	**Structural Work**	6,814	3,085	2,762	323	10	2.2
807381010	Automobile-Body Repairer	36	10	5	5	50	3.6
819384010	Welder, Combination	221	22	19	3	14	10.1
824261010	Electrician	153	47	33	14	30	3.3
828281010	Electronics Mechanic	38	5	2	3	60	7.6
840381010	Painter	87	34	27	7	21	2.6
844364010	Cement Mason	43	13	11	2	15	3.3
850683010	Bulldozer Operator	125	25	11	14	56	5.0
859683010	Operating Engineer	625	56	56	0	—	11.2
860381022	Carpenter	870	328	258	70	21	2.7
862381018	Pipe Fitter	50	6	2	4	67	8.3
862381030	Plumber	64	17	11	6	35	3.8
866381010	Roofer	42	6	6	0	—	7.0
869664014	Construction Worker	1,892	1,522	1,431	91	6	1.2
899381010	Maintenance Repairer	302	105	82	23	22	2.9
9	**Misc. Occupations**	3,548	2,187	1,951	236	11	1.6
	Motor Freight & Transportation	1,609	746	649	97	13	2.2
905663014	Truck Driver, Heavy	498	64	52	12	19	7.8
906683022	Truck Driver, Light	202	24	16	8	33	8.4
913463010	Bus Driver	220	196	196	0	—	1.1
913463018	Taxi Driver	33	68	56	12	18	0.5
915467010	Automobile-Service-Station Attendant	149	102	73	29	28	1.5
919687014	Cleaner, Vehicles	10	27	16	11	41	0.4
	Packaging & Materials Handling	2,766	1,298	1,204	94	7	2.1
920587018	Packager, Hand	41	19	15	4	21	2.2
920687014	Bagger, Grocery	27	87	74	7	8	0.3
929687030	Material Handler	651	569	529	40	7	1.1
	Mining						
930684026	Rotary-Driller Helper	19	—	—	—	—	—

Source: Alaska Department of Labor, Employment Security Automated Reporting System [ESARS], Table 96.

[1] *2 Digit Dictionary of Occupational Title Codes [4th Edition].*

[2] *A ratio in excess of 1.0 indicates an excess of applicants over job openings [supply] and a ratio less than 1.0 indicates more openings than applicants [demand].*

TABLE A-9
CIVILIAN LABOR FORCE, EMPLOYMENT UNEMPLOYMENT AND UNEMPLOYMENT RATE
BALANCE OF ALASKA 1/
1975-1981

		Civilian Labor Force	Employment	Unemployment Number	Unemployment Rate
1981	January	99,234	86,024	13,210	13.3
	February	102,029	88,424	13,605	13.3
	March	103,934	90,576	13,358	12.9
	April	105,618	94,255	11,363	10.8
	May	108,015	97,254	10,761	10.0
	June	113,091	101,159	11,932	10.6
	July	116,263	105,212	11,051	9.5
	August	112,014	101,991	10,023	8.9
	September	108,092	98,280	9,812	9.1
1980	January	92,595	81,334	11,261	12.2
	February	97,326	84,527	12,799	13.2
	March	100,156	86,745	13,411	13.4
	April	106,471	92,318	14,153	13.3
	May	109,286	97,148	12,138	11.1
	June	111,867	98,431	13,436	12.0
	July	114,012	102,057	11,955	10.5
	August	113,762	103,197	10,565	9.3
	September	108,257	98,681	9,576	8.8
	October	107,846	97,061	10,785	10.0
	November	103,954	92,704	11,250	10.8
	December	101,971	89,731	12,240	12.0
	Annual Average	105,625	93,661	11,964	11.3
1979	January	99,275	79,859	12,416	13.5
	February	94,238	80,899	13,339	14.2
	March	97,346	84,072	13,274	13.6
	April	100,155	88,171	11,984	12.0
	May	104,901	93,627	11,274	10.7
	June	107,719	96,629	11,090	10.3
	July	110,433	100,672	9,761	8.8
	August	110,119	101,345	8,774	8.0
	September	105,710	97,155	8,555	8.1
	October	102,244	92,659	9,585	9.4
	November	99,173	88,341	10,832	10.9
	December	97,596	85,968	11,628	11.9
	Annual Average	101,826	90,783	11,043	10.8
1978	January	91,684	77,813	13,871	15.1
	February	93,482	79,648	13,834	14.8
	March	96,796	82,285	14,511	15.0
	April	100,013	85,925	14,088	14.1
	May	103,291	88,564	14,727	14.3
	June	107,235	93,363	13,872	12.9
	July	105,929	93,615	12,314	11.6
	August	106,292	94,682	11,610	10.9
	September	102,682	91,618	11,064	10.8
	October	99,976	87,441	12,535	12.5
	November	98,451	84,877	13,574	13.8
	December	95,826	82,337	13,489	14.1
	Annual Average	100,138	86,847	13,291	13.3

1977	January	86,986	76,036	10,950	12.6
	February	90,804	78,832	11,972	13.2
	March	93,716	82,374	11,342	12.1
	April	97,795	86,693	11,102	11.4
	May	100,914	89,897	11,017	10.9
	June	102.020	92,508	9,512	9.3
	July	101,101	91,784	9,317	9.2
	August	98,049	89,659	8,390	8.6
	September	95,678	87,644	8,034	8.4
	October	94,008	84,385	9,623	10.2
	November	91,502	80,541	10.961	12.0
	December	91,287	78,595	12,692	13.9
	Annual Average	95,321	84,912	10,409	10.9
1976	January	84,393	73,898	10,495	12.4
	February	87,336	77,558	9,778	11.2
	March	93,270	82,647	10.623	11.4
	April	95,703	86,902	8,801	9.2
	May	102,791	92,812	9,979	9.7
	June	105,554	96,501	9,053	8.6
	July	107,953	100,268	7,685	7.1
	August	110,101	102,156	7,945	7.2
	September	106,689	98,974	7,715	7.2
	October	98,006	89,587	8,419	8.6
	November	93,278	83,482	9,796	10.5
	December	87,086	77,809	9,277	10.7
	Annual Average	97.681	88.550	9.131	9.3
1975	January	69,928	62,694	7,234	10.3
	February	74,704	67,426	7,278	9.7
	March	79,878	72,050	7,828	9.8
	April	87,456	80,099	7,357	8.4
	May	90,500	83,911	6,589	7.3
	June	93,984	87,011	6.973	7.4
	July	97,140	90,400	6,740	6.9
	August	101,731	95,683	6,048	5.9
	September	98,960	93,716	5,244	5.3
	October	97,672	91,405	6,267	6.4
	November	92.840	86.176	6,664	7.2
	December	85,150	76,884	8,266	9.7
	Annual Average	89,162	82,288	6,874	7.7

1/ *To conform to federal legislation all prior labor force data is adjusted to be consistent with the CPS annual averages for each state. This is not possible for current year estimates until the completion of the year. Because of this, the estimating methodology required for the current year's estimates is not strictly comparable to prior year's data.*

HISTORICAL SERIES
NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1980

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary ...	153,500	156,200	159,300	166,600	172,900	176,300	181,100	182,600	178,200	174.000	168.500	163,900	169,400
Mining	5,900	5,900	6,000	6,300	6,400	6,500	7,100	7,200	6,900	6,600	6,800	6,700	6,500
Construction	6,900	7,200	7,800	9,000	10,700	11,700	12,400	13,200	13,300	12,400	10,400	8,700	10,300
Manufacturing	8,700	9,900	10,800	12,800	14,400	15,500	19,600	19,600	15,100	13,500	11,200	9,300	13,400
Food & Kind. Prod.	3,700	4,700	5,000	6,600	7,700	8,400	12,500	12,300	8,500	7,200	5,700	4,200	7,200
Lum. & Paper Prod. ...	2,600	2,800	3,300	3,700	4,000	4,200	4,100	4,200	3,500	3,300	2,800	2,500	3,400
All Other Mfg.	2,400	2,400	2,500	2,500	2,700	2,900	3,000	3,100	3,100	3,000	2,700	2,600	2,700
Trans. Comm. & Util. ...	15,800	16,000	16,400	16,600	17,200	18,100	18,000	17,900	17,800	17,000	16,600	16,300	17,000
Trucking & Whse.	1,800	1,800	1,900	1,900	1,900	2,000	2,100	2,100	2,100	1,800	1,700	1,700	1,900
Water Trans.	1,000	1,100	1,200	1,300	1,400	1,700	1,500	1,500	1,400	1,200	1,200	1,100	1,300
Air Transportation	4,900	4,900	5,000	5,000	5,300	5,600	5,700	5,700	5,500	5,400	5,200	5,100	5,300
Other Trans. Comm. & Utilities	8,100	8,200	8,300	8,400	8,600	8,800	8,700	8,600	8,800	8,600	8,500	8,400	8,500
Trade	27,300	26,600	26,900	27,900	29,200	30,400	30,600	30,500	30,500	29,800	29,500	29,800	29,100
Wholesale Trade	5,200	5,100	5,200	5,400	5,500	5,600	5,800	5,800	5,700	5,400	5,300	5,400	5,500
Retail Trade	22,100	21,500	21,700	22,500	23,700	24,800	24,800	24,700	24,800	24,400	24,200	24,400	23,600
Gen. Merchandise & Apparel	4,100	3,900	3,800	3,900	4,000	4,400	4,300	4,300	4,300	4,200	4,300	4,600	4,200
Food Stores	3,500	3,400	3,400	3,600	3,800	3,800	3,900	3,800	4,000	4,000	4,000	4,000	3,800
Eating & Drinking Places	6,900	7,000	7,300	7,600	8,100	8,600	8,800	8,700	8,600	8,300	8,000	7,800	8,000
Other Retail Trade ...	7,600	7,200	7,200	7,400	7,800	8,000	7,800	7,900	7,900	7,900	7,900	8,000	7,700
Finance-Insurance & Real Estate	8,100	8,000	8,100	8,100	8,200	8,300	8,500	8,500	8,300	8,200	8,200	8,100	8,200
Services & Misc.	27,700	28,000	28,300	30,100	30,800	31,200	31,700	31,800	31,400	30,200	29,400	28,900	30,000
Government	53,100	54,600	55,000	55,800	56,000	54,600	53,200	53,900	54,900	56,300	56,400	56,100	55,000
Federal Government...	16.800	16,900	16,900	18,100	18,300	18,400	18,400	18,200	17,600	18,000	18,100	17,900	17,800
State Government.....	14.400	15,300	15.500	15,200	14,800	15.000	15,000	15,100	15.900	16,200	16,000	15,900	15,400
Local Government	21,900	22,400	22,600	22.500	22,900	21.200	19,800	20,600	21.400	22.100	22.300	22,300	21,800

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark date March 1980

Available by region upon request.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1979

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary	154,500	154,600	158,400	162,400	169,100	174,400	178,800	179,800	175,600	170,100	164,500	160,500	166,900
Mining	5,500	5,600	5,700	5,600	6,000	6,100	6,000	6,000	5,800	5,500	5,700	5,600	5,800
Construction	7,700	7,200	7,500	8,500	9,700	11,300	12,000	12,900	13,400	12,400	10,000	8,300	10,100
Manufacturing	6,800	7,300	9,200	10,700	13,200	15,100	20,900	19,400	15,400	13,500	11,200	9,600	12,700
Food & Kind. Prod.	2,900	3,400	4,600	5,300	7,200	8,700	14,500	12,900	8,700	7,000	5,200	4,200	7,100
Lum. & Paper Prod.	1,600	1,700	2,200	3,100	3,500	3,700	3,600	3,700	3,900	3,800	3,500	3,000	3,100
All Other Mfg.	2,300	2,200	2,400	2,300	2,500	2,700	2,800	2,800	2,800	2,700	2,500	2,400	2,500
Trans. Comm. & Util.	15,600	15,600	15,600	15,900	16,600	17,700	17,600	18,000	17,900	16,900	16,500	16,300	16,700
Trucking & Whse.	2,000	2,000	1,900	1,900	2,000	2,200	2,200	2,400	2,300	1,800	1,800	1,800	2,000
Water Trans.	900	900	900	1,100	1,300	1,500	1,500	1,500	1,500	1,400	1,200	1,200	1,200
Air Transportation	4,500	4,500	4,500	4,700	5,000	5,400	5,500	5,500	5,400	5,100	5,000	4,900	5,000
Other Trans. Comm. & Utilities	8,200	8,200	8,300	8,200	8,300	8,600	8,400	8,600	8,700	8,600	8,500	8,400	8,400
Trade	28,300	27,900	28,100	28,700	29,600	30,700	30,700	30,800	30,400	29,700	29,100	29,300	29,400
Wholesale Trade	5,300	5,300	5,300	5,400	5,600	5,800	5,800	5,800	5,600	5,400	5,300	5,300	5,500
Retail Trade	23,000	22,600	22,800	23,300	24,000	24,900	24,900	25,000	24,800	24,300	23,800	24,000	24,000
Gen. Merchandise & Apparel	4,000	3,800	3,800	3,900	4,000	4,200	4,200	4,200	4,200	4,300	4,400	4,600	4,100
Food Stores	3,200	3,200	3,200	3,600	3,700	3,800	3,800	3,800	3,800	3,800	3,700	3,800	3,600
Eating & Drinking Places	8,000	8,000	8,200	8,000	8,200	8,600	8,700	8,700	8,600	8,300	7,800	7,600	8,200
Other Retail Trade	7,800	7,600	7,600	7,800	8,100	8,300	8,200	8,300	8,200	7,900	7,900	8,000	8,000
Finance-Insurance & Real Estate	8,500	8,400	8,600	8,500	8,700	8,800	8,600	8,700	8,300	8,400	8,300	8,300	8,500
Services & Misc.	28,000	28,000	28,700	29,200	29,700	30,600	30,900	31,600	30,500	28,800	28,600	28,200	29,400
Government	53,600	54,600	55,000	55,300	55,600	54,100	52,100	52,400	54,900	54,900	55,100	54,900	54,400
Federal Government	17,600	17,400	17,500	17,600	17,800	18,000	18,600	18,800	18,600	17,800	17,600	17,600	17,900
State Government	14,000	15,000	15,100	15,200	14,700	15,200	15,300	14,900	15,200	15,000	15,200	15,300	15,000
Local Government	22,000	22,200	22,400	22,500	23,100	20,900	18,200	18,700	21,100	22,100	22,300	22,000	21,500

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Benchmark date March 1980.

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1978

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary ...	151,900	153,300	155,900	159,600	165,300	170,800	169,500	173,900	173,800	167,100	162,100	158,300	163,500
Mining	5,200	5,300	5,500	5,700	5,800	5,800	5,600	5,800	5,600	5,500	5,400	5,300	5,500
Construction	10,500	10,000	10,200	10,700	12,600	14,400	14,600	15,100	14,800	13,600	11,100	9,300	12,200
Manufacturing	8,100	8,600	9,600	10,700	11,400	13,600	16,700	17,700	13,800	10,800	9,500	8,200	11,600
Food & Kind. Prod.	4,000	4,500	5,000	5,300	5,700	7,600	10,600	11,500	7,800	5,400	4,700	3,900	6,300
Lum. & Paper Prod. ...	2,100	2,100	2,500	3,200	3,400	3,600	3,500	3,600	3,500	2,900	2,400	2,000	2,900
All Other Mfg.	2,000	2,000	2,100	2,200	2,300	2,400	2,600	2,600	2,500	2,500	2,400	2,300	2,300
Trans. Comm. & Util. ...	15,500	15,400	15,500	15,700	16,200	17,200	17,300	17,800	17,400	16,300	15,900	15,400	16,300
Trucking & Whse.	2,100	2,200	2,200	2,300	2,300	2,700	2,800	3,000	2,800	2,100	2,100	2,000	2,400
Water Trans.	900	800	800	1,100	1,400	1,600	1,300	1,400	1,300	1,300	1,100	900	1,200
Air Transportation	4,200	4,200	4,200	4,300	4,400	4,600	4,900	5,000	4,800	4,600	4,600	4,500	4,500
Other Trans. Comm. & Utilities	8,300	8,200	8,300	8,000	8,100	8,300	8,300	8,400	8,500	8,300	8,100	8,000	8,200
Trade	27,200	27,000	27,300	27,900	28,900	30,100	30,100	30,400	30,100	29,300	28,700	29,000	28,800
Wholesale Trade	5,500	5,500	5,500	5,600	5,700	5,900	6,100	6,000	5,800	5,700	5,600	5,500	5,700
Retail Trade	21,700	21,500	21,800	22,300	23,200	24,200	24,000	24,400	24,300	23,600	23,100	23,500	23,100
Gen. Merchandise & Apparel	4,200	4,000	4,000	4,000	4,100	4,300	4,100	4,200	4,400	4,400	4,300	4,600	4,200
Food Stores	3,300	3,200	3,200	3,300	3,500	3,600	3,500	3,600	3,600	3,500	3,500	3,500	3,400
Eating & Drinking Places	6,500	6,700	7,000	7,100	7,500	7,800	8,100	8,100	8,000	7,700	7,400	7,500	7,500
Other Retail Trade ...	7,700	7,600	7,600	7,900	8,100	8,500	8,300	8,500	8,300	8,000	7,900	7,900	8,000
Finance-Insurance & Real Estate	8,900	8,800	8,900	8,200	8,500	8,600	9,100	8,800	8,500	8,600	8,700	8,700	8,700
Services & Misc.	26,300	26,800	27,300	28,100	28,700	29,700	30,900	31,500	29,800	28,500	28,200	28,200	28,700
Government	50,200	51,400	51,600	52,600	53,200	51,400	45,200	46,800	53,800	54,500	54,600	54,200	51,600
Federal Government...	17,500	17,500	17,500	17,700	18,200	18,700	18,700	18,800	18,600	18,300	18,300	18,200	18,200
State Government.....	13,200	14,100	14,200	14,400	14,200	14,300	14,100	14,300	14,400	15,000	14,900	14,700	14,300
Local Government	19,500	19,800	19,900	20,500	20,800	18,400	12,400	13,700	20,800	21,200	21,400	21,300	19,100

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1977

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary ...	151,500	154,200	157,900	163,000	167,800	171,500	171,000	171,600	171,100	166,200	160,300	157,000	163,600
Mining	4,100	4,300	4,500	4,500	4,500	4,800	4,800	4,800	4,600	4,800	4,800	4,800	4,600
Construction	18,400	18,900	19,600	21,500	22,800	23,500	22,400	21,200	20,200	18,100	14,900	13,000	19,500
Manufacturing	7,300	8,000	8,800	10,200	10,900	12,800	15,000	15,300	12,600	10,600	9,400	8,500	10,800
Food & Kind. Prod.	3,100	3,400	3,600	4,500	5,000	6,800	9,400	9,400	6,800	5,200	4,500	4,000	5,500
Lum. & Paper Prod. ...	2,500	2,900	3,400	3,800	4,000	4,000	3,500	3,700	3,700	3,400	3,000	2,600	3,400
All Other Mfg.	1,700	1,700	1,800	1,900	1,900	2,000	2,100	2,200	2,100	2,000	1,900	1,900	1,900
Trans. Comm. & Util. ...	14,100	14,200	14,300	14,100	14,700	15,000	18,000	18,400	18,500	17,100	17,000	16,600	16,000
Trucking & Whse.	2,600	2,600	2,700	2,500	2,400	2,700	3,000	3,100	3,100	2,500	2,500	2,300	2,700
Water Trans.	1,000	1,000	1,000	900	1,300	1,300	1,800	1,900	1,800	1,300	1,200	1,100	1,300
Air Transportation	4,000	4,100	4,100	4,300	4,500	4,500	4,600	4,600	4,600	4,500	4,400	4,300	4,400
Other Trans. Comm. & Utilities	6,500	6,500	6,500	6,400	6,500	6,500	8,600	8,800	9,000	8,800	8,900	8,900	7,700
Trade	26,300	26,000	26,400	27,500	28,700	29,900	29,400	29,900	29,600	29,300	29,100	29,300	28,500
Wholesale Trade......	5,600	5,600	5,700	5,800	6,000	6,200	6,200	6,300	6,000	5,800	5,700	5,800	5,900
Retail Trade	20,700	20,400	20,700	21,700	22,700	23,700	23,200	23,600	23,600	23,500	23,400	23,500	22,600
Gen. Merchandise & Apparel	4,200	4,000	3,900	4,000	4,100	4,400	4,400	4,400	4,500	4,500	4,700	4,800	4,300
Food Stores	2,900	2,900	2,900	3,000	3,200	3,200	3,200	3,200	3,200	3,300	3,200	3,300	3,100
Eating & Drinking Places	6,200	6,200	6,500	6,900	7,300	7,700	7,400	7,600	7,700	7,400	7,100	7,000	7,100
Other Retail Trade ...	7,400	7,300	7,400	7,800	8,100	8,400	8,200	8,400	8,200	8,300	8,400	8,400	8,000
Finance-Insurance & Real Estate	7,700	7,600	7,800	7,800	8,000	8,500	8,600	8,500	8,500	8,800	8,700	8,800	8,300
Services & Misc.	26,300	26,900	27,500	28,000	28,500	28,800	26,300	25,400	27,000	27,200	26,500	26,300	27,100
Government	47,300	48,300	49,000	49,400	49,700	48,200	46,500	47,100	50,100	50,300	49,900	49,700	48,800
Federal Government...	17,400	17,400	17,400	17,300	17,800	18,100	18,000	18,100	18,300	17,900	17,600	17,600	17,700
State Government.....	12,900	13,500	14,000	13,900	13,900	14,200	13,800	13,900	14,000	14,300	14,000	13,800	13,900
Local Government	17,000	17,400	17,600	18,200	18,000	15,900	14,700	15,100	17,800	18,100	18,300	18,300	17,200

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1976

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary ...	149,000	154,500	161,400	168,000	176,300	183,300	187,700	190,600	186,200	171,600	163,000	154,600	170,500
Mining	3,400	3,700	3,800	3,700	3,600	3,900	4,300	4,300	4,300	4,200	4,100	4,200	4,000
Construction	19,900	22,800	26,800	29,800	33,300	35,600	38,700	39,400	37,200	32,400	26,400	20,900	30,300
Manufacturing	6,700	7,400	8,000	9,000	10,500	12,100	14,100	14,800	13,100	10,300	9,500	8,500	10,300
Food & Kind. Prod.	2,900	3,400	3,600	4,000	5,000	6,300	8,200	8,600	7,000	4,600	4,100	3,800	5,100
Lum. & Paper Prod. ...	2,200	2,300	2,600	3,000	3,400	3,700	3,700	3,900	4,000	3,700	3,500	2,900	3,200
All Other Mfg.	1,600	1,700	1,800	2,000	2,100	2,100	2,200	2,300	2,100	2,000	1,900	1,800	2,000
Trans. Comm. & Util. ...	15,200	15,200	15,200	15,400	16,000	16,800	16,500	16,800	17,200	15,400	15,000	14,600	15,800
Trucking & Whse......	3,200	3,100	3,000	2,900	3,100	3,200	3,300	3,600	3,700	3,300	3,300	3,000	3,200
Water Trans.	1,200	1,100	1,100	1,200	1,300	1,600	1,500	1,500	1,600	1,400	1,300	1,200	1,300
Air Transportation	4,400	4,400	4,500	4,600	4,800	5,100	5,000	5,000	5,000	4,400	4,300	4,300	4,700
Other Trans. Comm. & Utilities	6,400	6,600	6,600	6,700	6,800	6,900	6,700	6,700	6,900	6,300	6,100	6,100	6,600
Trade	26,000	25,600	26,000	27,300	28,500	29,500	29,100	29,400	29,100	26,900	26,500	26,600	27,500
Wholesale Trade......	5,900	5,900	6,000	6,200	6,200	6,400	6,300	6,300	6,200	6,000	5,800	5,800	6,100
Retail Trade	20,100	19,700	20,000	21,100	22,300	23,100	22,800	23,100	22,900	20,900	20,700	20,800	21,500
Gen. Merchandise & Apparel..........	4,200	3,900	3,900	4,000	4,100	4,300	4,300	4,400	4,500	4,400	4,400	4,500	4,200
Food Stores.........	2,800	2,700	2,800	2,900	3,100	3,100	3,100	3,200	3,200	3,000	3,000	3,000	3,000
Eating & Drinking Places..............	5,800	5,900	6,000	6,300	6,900	7,200	7,100	7,200	7,000	6,100	6,000	5,900	6,500
Other Retail Trade ...	7,300	7,200	7,300	7,900	8,200	8,500	8,300	8,300	8,200	7,400	7,300	7,400	7,800
Finance-Insurance & Real Estate..........	6,700	6,800	6,900	7,300	7,600	8,000	8,100	8,200	8,100	7,800	7,700	7,500	7,600
Services & Misc........	25,600	26,800	27,600	28,100	28,700	29,500	29,000	29,200	29,000	28,100	27,300	26,500	28,000
Government...........	45,500	46,200	47,100	47,400	48,100	47,900	47,900	48,500	48,200	46,500	46,500	45,800	47,100
Federal Government...	17,700	17,700	17,700	17,500	18,000	18,200	18,300	18,300	18,500	18,000	17,700	17,500	17,900
State Government.....	14,400	14,900	15,600	15,900	16,300	16,000	15,100	15,500	15,100	13,600	13,400	13,000	14,900
Local Government	13,400	13,600	13,800	14,000	13,800	13,700	14,500	14,700	14,600	14,900	15,400	15,300	14,300

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1975

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary	130,300	136,200	143,700	154,700	161,600	167,900	172,800	180,600	179,900	176,100	168,900	156,900	160,800
Mining	3,500	3,800	4,000	4,500	4,400	4,200	3,600	3,800	3,700	3,300	3,400	3,400	3,800
Construction	12,800	15,200	18,000	22,900	24,400	27,900	30,900	35,800	35,200	34,500	30,100	20,900	25,700
Manufacturing	6,300	6,600	7,000	8,600	10,400	10,400	13,500	14,200	11,600	10,400	9,000	7,800	9,700
Food & Kind. Prod.	2,200	2,300	2,300	3,300	4,400	4,400	7,200	7,900	5,400	4,600	4,200	3,600	4,300
Lum. & Paper Prod.	2,500	2,600	2,900	3,400	3,900	3,800	4,100	4,200	4,100	3,800	2,900	2,400	3,400
All Other Mfg.	1,600	1,700	1,800	1,900	2,100	2,200	2,200	2,100	2,100	2,000	1,900	1,800	2,000
Trans. Comm. & Util.	13,800	14,200	14,900	15,600	16,200	17,500	17,200	17,800	18,100	17,700	17,400	16,800	16,400
Trucking & Whse.	2,700	3,100	3,300	3,800	3,700	4,400	4,300	4,500	4,600	4,300	4,400	3,900	3,900
Water Trans.	1,100	1,000	1,100	1,100	1,400	1,700	1,600	1,700	1,700	1,600	1,300	1,400	1,400
Air Transportation	4,200	4,300	4,600	4,700	4,800	5,000	4,900	5,100	5,000	5,000	4,900	4,800	4,800
Other Trans. Comm. & Utilities	5,800	5,800	5,900	6,000	6,300	6,400	6,400	6,500	6,800	6,800	6,800	6,700	6,400
Trade	22,500	22,900	23,500	24,300	25,600	26,800	27,500	28,300	27,900	27,800	27,900	28,200	26,100
Wholesale Trade	4,900	5,100	5,200	5,600	5,700	5,900	6,300	6,500	6,200	6,100	6,100	6,100	5,800
Retail Trade	17,600	17,800	18,300	18,700	19,900	20,900	21,200	21,800	21,700	21,700	21,800	22,100	20,300
Gen. Merchandise & Apparel	3,800	3,700	3,700	3,700	3,900	4,200	4,200	4,200	4,300	4,400	4,500	4,700	4,100
Food Stores	2,400	2,400	2,400	2,400	2,500	2,600	2,800	2,800	2,900	2,700	2,700	2,800	2,600
Eating & Drinking Places	4,900	5,200	5,500	5,800	6,200	6,600	6,700	7,100	7,000	6,700	6,800	6,700	6,300
Other Retail Trade	6,500	6,500	6,700	6,800	7,300	7,500	7,500	7,700	7,500	7,900	7,800	7,900	7,300
Finance-Insurance & Real Estate	5,600	5,700	5,800	6,200	6,500	6,800	7,300	7,300	7,300	7,200	7,100	7,100	6,700
Services & Misc.	21,400	22,300	24,100	25,300	26,100	25,800	26,300	26,600	26,800	26,600	26,300	25,700	25,300
Government	44,400	45,500	46,400	47,300	48,000	48,500	46,500	46,800	49,300	48,600	47,700	47,000	47,200
Federal Government	17,700	17,700	17,800	17,800	18,400	18,700	19,000	18,800	18,900	18,400	18,200	18,000	18,300
State Government	14,100	14,800	15,500	15,900	15,800	16,500	15,300	15,700	16,200	15,800	15,100	15,000	15,500
Local Government	12,600	13,000	13,100	13,600	13,800	13,300	12,200	12,300	14,200	14,400	14,400	14,000	13,400

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NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA
1974

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Nonag. Wage & Salary ...	103,200	105,200	108,800	115,800	124,300	131,600	138,900	142,500	142,300	139,900	137,400	136,000	127,200
Mining	2,100	2,400	2,700	3,000	3,200	3,000	3,200	3,300	3,100	3,100	3,000	3,100	2,900
Construction	5,200	5,300	6,100	8,200	11,800	15,600	16,800	18,100	18,700	19,200	17,100	15,300	13,100
Manufacturing	6,800	7,000	7,700	9,100	9,900	11,400	12,900	13,500	11,600	9,700	9,000	7,600	9,700
Food & Kind. Prod.	3,000	3,000	3,400	4,000	4,200	5,300	6,700	7,300	5,500	3,700	3,300	2,700	4,300
Lum. & Paper Prod. ...	2,400	2,600	2,900	3,600	4,100	4,400	4,500	4,400	4,300	4,200	3,900	3,300	3,700
All Other Mfg.	1,400	1,400	1,400	1,500	1,600	1,700	1,700	1,800	1,800	1,800	1,800	1,600	1,600
Trans. Comm. & Util. ...	10,100	10,400	10,600	11,000	11,700	12,700	13,000	13,600	13,800	13,300	13,300	13,100	12,200
Trucking & Whse.	1,300	1,500	1,600	1,600	1,800	1,900	2,300	2,600	2,600	2,700	2,800	2,900	2,100
Water Trans.	800	800	800	1,000	1,000	1,300	1,100	1,300	1,200	1,100	1,100	900	1,000
Air Transportation	3,100	3,100	3,200	3,600	3,900	4,400	4,600	4,600	4,600	3,800	3,600	3,600	3,800
Other Trans. Comm. & Utilities	4,900	5,000	5,000	4,800	5,000	5,100	5,000	5,100	5,400	5,700	5,800	5,700	5,200
Trade	17,900	17,800	18,400	19,500	20,700	22,000	22,300	22,400	22,900	23,400	23,700	24,100	21,300
Wholesale Trade	3,800	3,800	3,900	4,200	4,400	4,600	4,800	5,000	5,000	4,900	4,900	5,000	4,500
Retail Trade	14,100	14,000	14,500	15,300	16,300	17,400	17,500	17,400	17,900	18,500	18,800	19,100	16,700
Gen. Merchandise & Apparel	3,300	3,200	3,300	3,400	3,400	3,800	4,000	3,700	3,900	4,500	4,600	4,800	3,800
Food Stores	1,800	1,800	1,900	1,900	2,100	2,100	2,100	2,100	2,100	2,200	2,300	2,300	2,100
Eating & Drinking Places	3,700	3,800	3,900	4,300	4,800	5,200	5,100	5,200	5,500	5,400	5,400	5,400	4,800
Other Retail Trade ...	5,300	5,200	5,400	5,700	6,000	6,300	6,300	6,400	6,400	6,400	6,500	6,600	6,000
Finance-Insurance & Real Estate	4,700	4,800	4,900	5,200	5,300	5,500	5,700	5,600	5,600	5,600	5,600	5,600	5,300
Services & Misc.	15,400	15,900	16,300	17,400	18,700	19,400	20,300	20,700	21,000	21,600	21,600	21,500	19,200
Government	41,000	41,600	42,100	42,400	43,000	42,000	44,700	45,300	45,600	44,000	44,100	45,700	43,500
Federal Government...	17,100	17,200	17,400	17,900	18,400	18,100	18,800	18,800	18,500	17,800	17,800	18,700	18,000
State Government.....	12,700	13,100	13,300	13,000	13,100	12,800	14,900	15,100	15,100	14,000	14,200	14,600	13,800
Local Government	11,200	11,300	11,400	11,500	11,500	11,100	11,000	11,400	12,000	12,200	12,100	12,400	11,600

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark date March 1980.

Available by region upon request.